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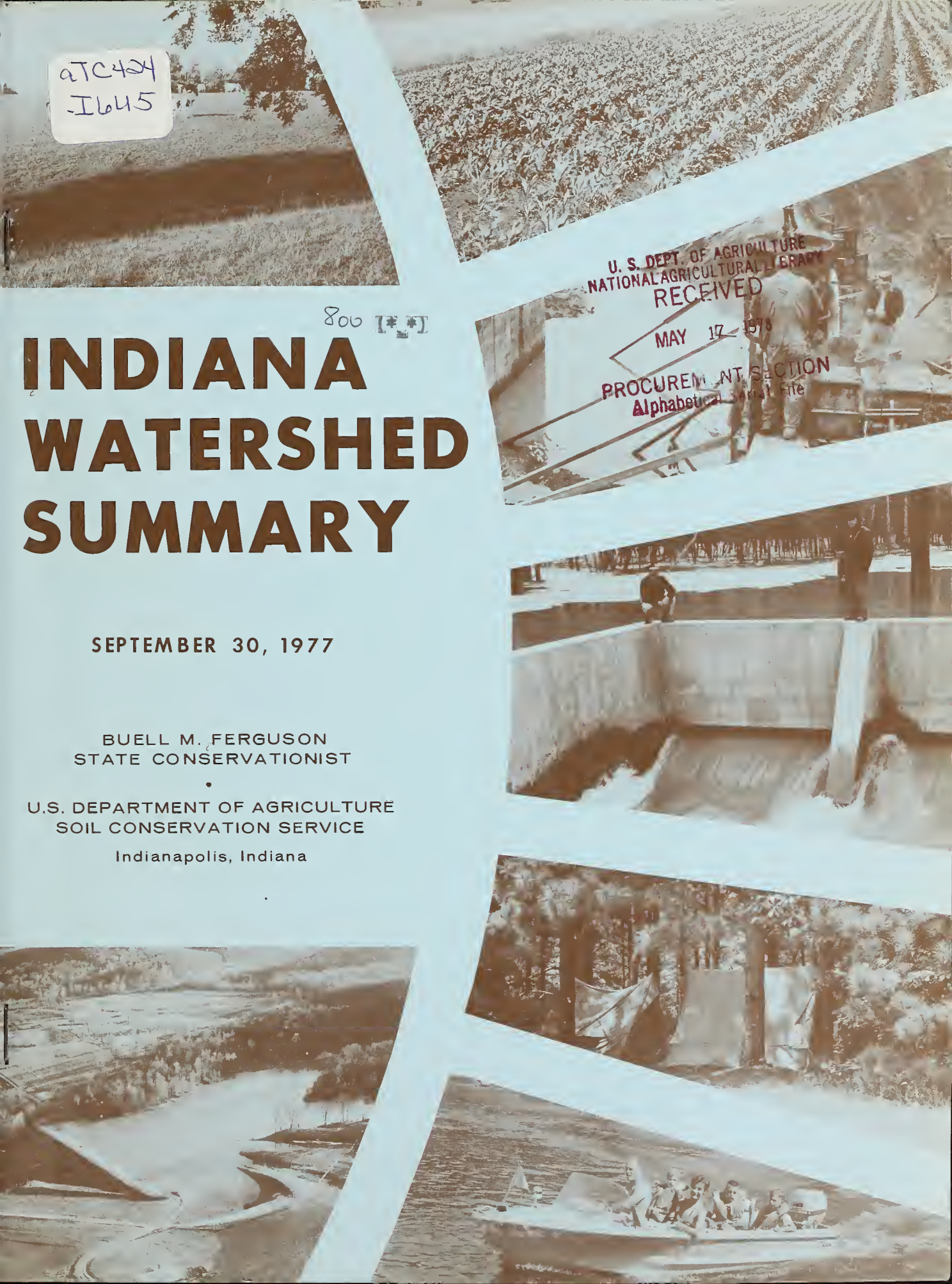
# INDIANA WATERSHED SUMMARY

SEPTEMBER 30, 1977

BUELL M. FERGUSON  
STATE CONSERVATIONIST

U.S. DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

Indianapolis, Indiana

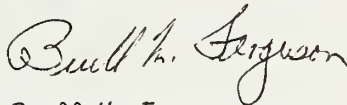


## STATUS OF WATERSHEDS

Potential Projects	205
Applications Received	118
Plans in Process of Development	4
Plans Awaiting Authorization	1
Plans Authorized for Construction	25
Construction Underway	[7]
Preconstruction [Design, Land Easements and Rights-of-Way]	[8]
Temporarily Halted	[10]
Applications to be Serviced	17
Inactive	63
PL-566 Projects Completed	7
Pilot Program - Completed	[1]

## FOREWORD

*This summary has been prepared to reflect the current status of Indiana small watershed projects and applications under Public Law 83-566, as amended. It gives brief facts on a statewide basis and specific details about each watershed for which an application has been received. Projections for Fiscal Year 1978 (October 1, 1977-September 30, 1978) are also shown.*



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## TABLE OF CONTENTS

	<u>Page</u>
River Basin and Watershed Progress Map	
Status of Structural Measures Map	
Watershed Status Charts Legend	1
Watershed Status Charts	3
Narratives for Operational Watersheds	13
River Basin Studies	41
Watershed Construction	49
Current and Projected Status of Watershed Operations	51
Indiana Conservancy Districts and Other Sponsors	53





## APPLICATION INACTIVE, TERMINATED, UNFEASIBLE OR SUSPENDED NOT SHOWN

## PROJECTS

- 121 Elk Creek 10-N  
131 Prallie Creek 6-N  
161 Boggs Creek 7-M  
181 French Lick Creek 8-Q  
1201 Lattas Creek 6-L  
1231 Little Wea Creek 7-H  
1251 Kickapoo Creek 6-G  
1Pilotl Pilot Creek 6-Q

- [11] Bussion Creek 6-L
- [115] Middle Fork of Anderson River 8-P
- [118] Stucker Fork 11-N
- [126] Jordan Creek 5-G
- [131] Lost River 8-N
- [135] Prairie Creek-Vernon 5-L
- [136] Bachelor Run 8-B
- [139] Muddy Fork of Silver Creek 10-O
- [142] Little Raccoon Creek 6-I
- [145] East Fork Whitewater 13-I
- [147] Snake Creek 9-N
- [148] Twin-Rush Creek 9-N
- [150] Mill Creek-Fulton Co. 8-E
- [156] Rock Creek-Wells Co. 12-F
- [159] Upper Big Blue River 11-I
- [159] Big Raccoon 7-I
- [161] Little Walnut Creek 7-J
- [161] West Boggs Creek 7-N
- [166] Rock Creek-Casa Co. 9-F
- [167] Indian Creek 9-K
- [172] Pryde Creek 6-O
- [173] Lyle Creek Drain 7-H
- [166] Hall-Fork Creek 7-D
- [180] Bailey-Newman 8-C
- [192] Fall Creek 6-H

- 171 West Creek 5-C  
130 Dowell Creek 8-M  
132 Mill Creek 8-J

- [38] Anderson River 7-P

- (43) Upper West Fork Whitewater 12-1  
(44) Whitewater River-Fayette 12-J  
(103) Feather Creek 5-J  
(114) Potter Co.-Kankakee River 8-C

- (77) Honey Creek 6-K  
(78) Snapp-Kelso Creek 5-N  
(83) Buckeye-Hoosier-Wabash River 13-G  
(84) Silver Creek 10-N  
(88) Blue River 9-0  
(89) White Lick Creek 8-I  
(93) Hou-Karoke Creek 6-0  
(104) Mill Creek-LaPorte 7-B  
(107) Upper Kanawha Creek 8-B  
(108) Lower Yellow River 8-0  
(109) Upper Yellow River 9-C  
(110) New Waverly-Williams Creek 9-F  
(111) Robbins 8-C  
(112) Crooked Creek 8-E  
(113) Maxwell Grain 7-E  
(115) Mullick Creek 7-H  
(116) Machles Otch 7-C  
(117) Gallatin River 8-B

RIVER BASIN BOUNDARY



- |                                  |  |
|----------------------------------|--|
| OHIO RIVER BASIN                 | - FRAMEWORK SURVEY COMPLETED<br>(INCLUDES WABASH BASIN)              |
| UPPER MISSISSIPPI<br>RIVER BASIN | - FRAMEWORK SURVEY COMPLETED<br>(INCLUDES KANKAKEE BASIN)            |
| GREAT LAKES BASIN                | - FRAMEWORK SURVEY COMPLETED<br>(INCLUDES ELKHART AND MAUMEE BASINS) |
| WABASH RIVER BASIN               | - TYPE II SURVEY COMPLETED   |
| ELKHART RIVER BASIN              | - COOPERATIVE SURVEY COMPLETED                                       |
| KANKAKEE RIVER BASIN             | - COOPERATIVE SURVEY COMPLETED                                       |
| MAUMEE RIVER BASIN               | - LEVEL B SURVEY IN PROGRESS   |
| OHIO MAIN STEM                   | - LEVEL B SURVEY IN PROGRESS   |

SOURCE  
FAMILY OF MAPS SCS ORWGNO 5,5-32,450 (3-74)  
AND INFORMATION FROM FIELD TECHNICIANS  
ALBERS EQUAL AREA PROJECTION

SCALE 1/1,612,000

SCALE 10 0 10 20 30 40 50 MILES

REV. 8-10-77  
5. S-34.302.





# STATUS OF WATERSHED (PL-566) STRUCTURAL MEASURES

## INDIANA

SEPTEMBER 30, 1977

## CONSTRUCTION COMPLETED

- (2) Elk Creek 10-N
- (3) Pialiro Creek 6-N
- (9) Boggs Creek 7-M
- (9) French Lick Creek 8-O
- (20) Lattas Creek 6-L
- (23) Little Wagon Creek 7-H
- (25) Kickapoo Creek 6-G
- (Pilot) Flat Creek 6-O

## AUTHORIZED FOR CONSTRUCTION

- (1) Busseron Creek 6-L
- (15) Middle Fork of Anderson River 8-P
- (18) Stucker Fork 11-N
- (26) Jordan Creek 5-G
- (31) Lost River 8-N
- (35) Prairie Creek-Vigo 5-L
- (36) Bachelor Run 8-F
- (39) Muddy Fork of Silver Creek 10-O
- (42) Little Raccoon Creek 6-L
- (45) East Fork Whitewater 13-L
- (47) Delaney Creek 8-N
- (48) Twin-Rush Creek 8-N
- (50) Mill Creek-Fulton Co. 8-E
- (56) Rock Creek-Wells Co. 12-F
- (58) Upper Big Blue River 11-L
- (59) Big Raccoon 7-L
- (60) Little Walnut Creek 7-J
- (61) West Boggs Creek 7-N
- (66) Rock Creek-Cass Co. 9-F
- (67) Indian Creek 9-K
- (73) Prides Creek 8-O
- (82) Lye Creek-Diion 7-H
- (86) Half-Ford Creek 7-O
- (90) Bailey-Cox-Newton 8-C
- (92) Fall Creek 6-H

## AUTHORIZED FOR CONSTRUCTION (CLOSED OUT)

- (7) West Creek 5-C
- (30) Devil Creek 6-M
- (32) Mill Creek 8-J

## PLANNING COMPLETED

- (38) Anderson River 7-P

## AUTHORIZED FOR PLANNING

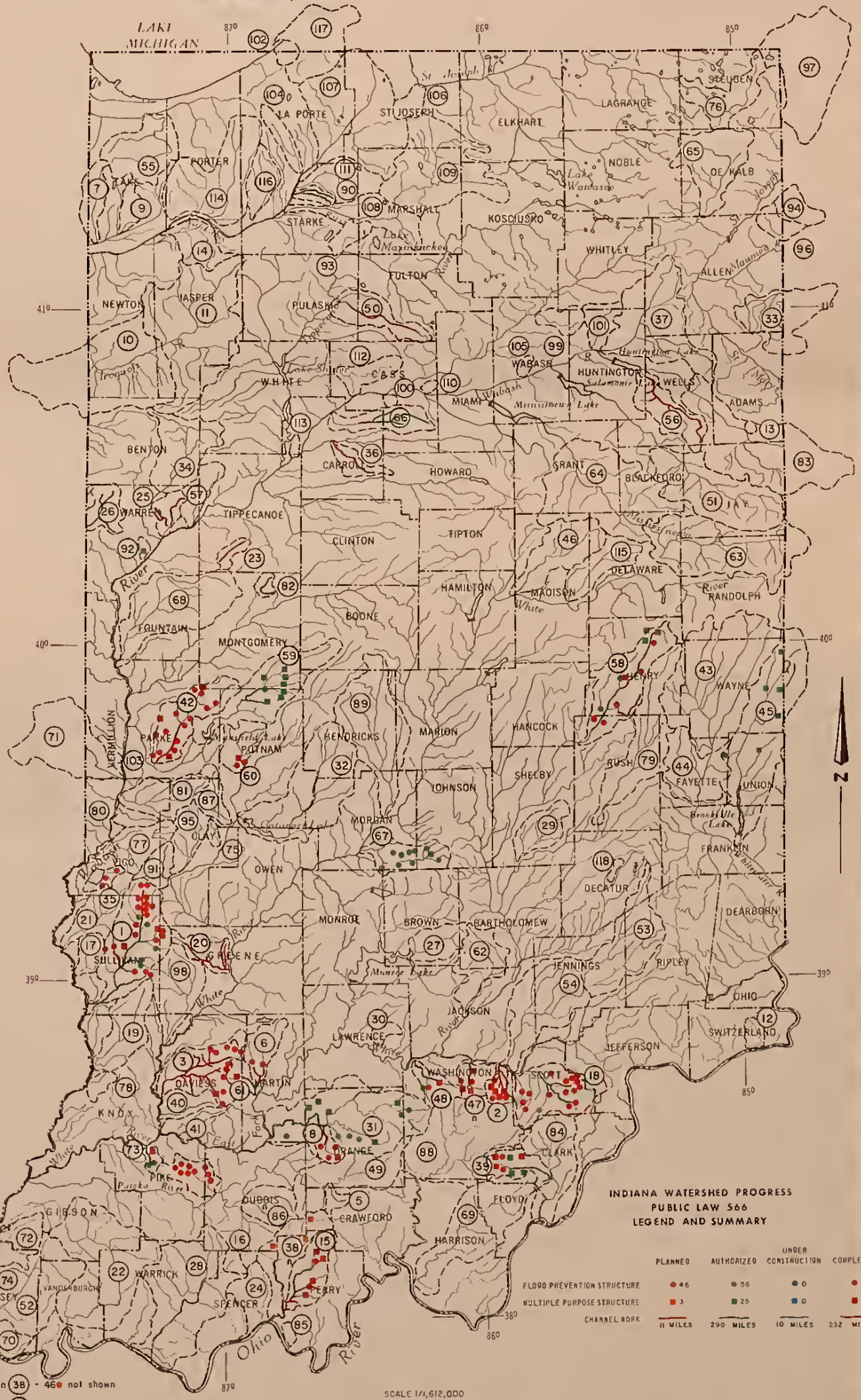
- (43) Upper West Fork Whitewater 12-L
- (44) Whitewater River-Foyell 12-J
- (103) Feather Creek 5-J
- (114) Porter Co.-Kankakee River 8-C

## APPLICATION RECEIVED

- (77) Honey Creek 6-K
- (78) Snapp-Kelso Creek 5-N
- (83) Buckeye-Hoosier-Wabash River 13-G
- (84) Silver Creek 10-N
- (88) Blue River 9-O
- (89) White Lick Creek 8-L
- (93) House-Bailey Ditch 8-O
- (104) Mill Creek-LaPorte 7-B
- (107) Upper Kankakee River 8-B
- (108) Lower Yellow River 8-O
- (109) Upper Yellow River 9-C
- (110) New Waverly-Williams Creek 9-F
- (111) Robbins 8-C
- (112) Crooked Creek 8-E
- (113) Maxwell Ditch 7-F
- (115) Killbuck Creek 11-H
- (116) Mochlos Ditch 7-C
- (117) Gallen River 8-B

## APPLICATION INACTIVE, TERMINATED, UNFEASIBLE OR SUSPENDED

- (5) Little Patoka Creek 6-O
- (9) Spring Run-Grisol 8-D
- (19) Lower Iroquois River 5-E
- (11) Upper Iroquois River 6-E
- (12) Leg Lick Creek 13-M
- (13) Long-Amelutz Ditch 13-F
- (14) Barnard Ditch 8-D
- (16) North Fork of Little Pigeon Creek 7-P
- (17) Tuttle Creek 5-L
- (19) Marlow Creek 6-M
- (21) Turman Creek 5-L
- (22) Pigeon Creek 5-P
- (24) Crooked Creek 7-P
- (27) Middle Fork of Salt Creek 9-L
- (28) Little Pigeon Creek 6-P
- (29) Lewis Creek 10-K
- (33) Flat Rock Creek 13-E
- (34) Big Pine Creek 8-G
- (37) Little River 12-E
- (40) Voate Creek 6-N
- (41) Alkman Creek 6-N
- (46) Pipe Creek 11-G
- (49) Upper Patoka River 8-O
- (51) Solomon River 12-G
- (52) Big Creek 4-P
- (53) Upper Vernon Fork 11-L
- (54) Lower Vernon Fork 14-M
- (55) Osop River 6-C
- (57) Little Pine Creek 8-G
- (62) White Creek 10-L
- (63) Upper Mississinewa River 12-H
- (64) Lower Mississinewa River 11-G
- (65) Cedar Creek 12-C
- (68) Cool Creek 8-H
- (69) Indian Creek 9-O (4) Little Indian Creek
- (70) Cassberry Creek 4-O
- (71) Broutillets Creek 5-J
- (72) Black River 4-P
- (74) Gresham Creek 4-P
- (75) McIntyre Creek 7-K
- (76) Pigeon River 12-B
- (79) Upper Big Flatrock 11-J
- (80) Lest Creek 6-K
- (81) Dilor Creek 6-J
- (85) Windy Creek 7-O
- (87) Cloys Creek 8-J
- (91) Splunge Creek 6-K
- (94) Gordon Creek 13-D
- (95) Birch Creek 6-K
- (96) Mario Delamo 13-O
- (97) St. Joseph of the Maumee 13-B
- (98) Black Creek 6-L
- (99) Pony Creek 10-E
- (100) Geese Creek 9-F
- (101) Clear Creek 11-E
- (102) Blood Run 7-B
- (105) Charley Creek 10-E
- (106) Bowman Creek 9-B
- (118) Gas Creek 11-K

INDIANA WATERSHED PROGRESS  
PUBLIC LAW 566  
LEGEND AND SUMMARY

	PLANNED	AUTHORIZED	UNDER CONSTRUCTION	COMPLETED
FLOOD PREVENTION STRUCTURE	46	56	0	84
MULTIPLE PURPOSE STRUCTURE	3	25	0	24
CHANNEL WORK	11 MILES	290 MILES	10 MILES	232 MILES

SOURCE  
FAMILY OF MAPS SCS ORWG NO. 5, S-32,450 (3-74)  
AND INFORMATION FROM FIELD TECHNICIANS.  
ALBERS EQUAL AREA PROJECTION

SCALE 1/4,612,000

SCALE 10 0 10 20 30 40 50 MILES

REV 8-24-77  
5, S-34,455



## WATERSHED STATUS CHARTS

The following charts show the status of Public Law 566 watershed projects as of September 30, 1976.

### LEGEND

#### Appl. No.

Number assigned to the application by the Indiana Natural Resources Commission.

#### Application Approved

Date application was approved by the Commission

#### Structural Measures

Ch - Channel work

SP - Single-Purpose Floodwater Retarding Structure

MP - Multiple-Purpose Floodwater Retarding Structure

WS - Water Supply

M&I - Municipal and Industrial Water Supply

Rec  
Fac - Recreational Facility

#### EIS

#### Environmental Impact Statement

1. Environmental assessment underway to determine whether an EIS or a negative declaration will be required.
2. EIS underway
3. EIS completed
4. Negative declaration completed.

#### Other Abbreviations

CD - Conservancy District

CEQ - Council on Environmental Quality

LT - Land Treatment

Suppl - Supplements to the work plan





Status as of September 30, 1977

Appl. No.	Watershed Name	Location (County/ies)	Tributary of	Size (Ac.)	Application Approved	Conservancy District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned		Completed			
										SP	MP	Other	SP		
(41)	Aikman Ck	Daviess	E. Fk. White Rvr	20,783	5/61	---	10/62	11/62	---	---	---	---	---	---	Planning assistance terminated
(38)	Anderson Rvr.	Perry, Dubois, Spencer & Crawford	Ohio Rvr	97,174	9/60	1/68	8/67	10/67	---	46	3	2 Rec Fac, 2 M&I Fac & 11 mi. Ch	---	---	Awaiting Cong. approval
(36)	Bachelor Run	Carroll & Howard	Deer Ck	23,519	5/60	8/64	11/61	4/62	4/64	2*	---	21 mi. Ch	2*	---	14 mi. Ch
(90)	Bailey-Cox-Newtonson	Starke	Kankakee Rvr	12,070	8/67	10/72	2/69	5/75	9/76	---	---	1 Pump Plant, 26.2 mi Ch,**	---	---	3 Est. Comp. FY82
(14)	Barnard Ditch	Jasper	Kankakee Rvr	54,476	10/58	---	3/63	---	---	---	---	---	---	---	Appl. canceled
(52)	Big Creek	Gibson, Posey & Vanderburgh	Wabash Rvr	162,796	8/62	---	4/64	---	---	---	---	---	---	---	Inactive
(34)	Big Pine	White, Benton & Warren	Wabash Rvr	112,000	5/60	---	4/63	---	---	---	---	---	---	---	Appl. canceled
(59)	Big Raccoon Dk	Montgomery, Parke, Putnam & Boone Hendricks	Wabash Rvr	133,120	12/62	8/66	4/64	5/65	4/69	2	6	15 mi. Ch & 4 Pub. access sites	---	---	2 Pub. access sites
(95)	Birch Ck	Clay	Eel Rvr	42,880	5/68	---	---	---	---	---	---	---	---	---	Inactive
(98)	Black Ck	Greene, Knox & Sullivan	W. Fk. White Rvr	89,472	11/68	---	1/72	---	---	---	---	---	---	---	Unfeasible
(72)	Black Rvr	Gibson & Posey	Wabash Rvr	60,000	11/63	---	---	---	---	---	---	---	---	---	Inactive
(102)	Blood Run	LaPorte, IN Berrien, MI	Galien Rvr	4,400	10/69	---	1971	---	---	---	---	---	---	---	Unfeasible
(88)	Blue River	Washington, Floyd, Harrison & Clark	Ohio Rvr	125,000	11/66	---	---	---	---	---	---	---	---	---	To be serviced
(6)	Boggs Ck	Martin & Daviess	E. Fk. White Rvr	20,800	7/55	2/	---	11/56	8/59	2	---	8 mi. Ch	2	---	8 mi Ch
*2 Grade Stabilization Structures **14 structures for water control and 14 acre-area for spawning 1/Negative Declaration on 8 mi. of channel filed with CEQ, June 1975. 2/Sponsor - Boggs Ck Maintenance Dist.															
- 3 -															

5, N-28, 148

\*2 Grade Stabilization Structures

\*\*14 structures for water control and 14 acre-area for spawning

1/Negative Declaration on 8 mi. of channel filed with CED, June 1975.

2/Sponsor - Boggs Ck Maintenance Dist.



Status as of September 30, 1977

Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Application Approved	Conservancy District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes	
										Planned	Completed	Other	Other			
(106)	Bowman Ck	St. Joseph	St. Joseph Rvr	12,704	7/70										Inactive	
(71)	Brouilletts	Vermillion & Vigo, IN, & Vermillion & Edgar, IL	Wabash Rvr	196,500	11/63										Unfeasible	
(83)	Buckeye-Hoosier-Wabash	Wells, Adams & Jay, IN, & Mercer, OH	Wabash Rvr	245,000	9/65										To be serviced	
(1)	Busseron Ck	Sullivan, Clay Greene & Vigo	Wabash Rvr	153,280	9/54	3/60	1/55	8/58	24	53 mi. Ch & 5 mi. levees	18	2	9 mi. Ch & 2 Rec Fac	2	Suppl - 6 Est. Comp. FY79	
(70)	Casselberry Ck Posey		Ohio Rvr	28,800	7/63										Inactive	
(65)	Cedar Ck	DeKalb & Noble	St. Joseph Rvr	102,700	4/63										Inactive	
(105)	Charley Ck	Wabash	Wabash Rvr	4,000	7/70										Inactive	
(101)	Clear Ck	Huntington & Whitley	Wabash Rvr	35,320	5/69										Inactive	
(68)	Coal Ck	Fountain, Parke & Montgomery	Wabash Rvr	169,742	7/63										Inactive	
(24)	Crooked Ck	Spencer	Ohio Rvr	55,000	3/59		12/61								Appl suspended	
(112)	Crooked Ck	Cass	Wabash Rvr	40,000	11/70										To be serviced	
(87)	Croys Ck	Clay, Putnam & Parke	Eel Rvr	25,406	4/66	12/70	10/69	8/71							Inactive	
(55)	Deep Rvr	Lake & Porter	Little Calumet & Burns Ditch	96,640	12/62										Inactive	
(47)	Delaney Ck	Washington	Muscatauck Rvr	21,905	9/61	6/64	10/63	2/64	4/69	9	3	Rec. Fac.	2	3	0	1 Est. Comp. FY78
<div> <div>1</div> <div>Supplement #5, dtd 2/77, deleted channel work and added 7 SP structures.</div> </div>																
<div> <div>- 4 -</div> <div>5, N-28, 148</div> </div>																

<sup>1</sup> Supplement #5, dtd 2/77, deleted channel work and added 71 SP structures.

Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Application Approved	Conservancy District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned	Completed	Other	Other		
										SP	MP	Other	SP	MP	Other
(30)	Dewitt Ck	Lawrence	Guthrie Ck	9,000	10/59	---	5/62	8/62	6/63	---	---	---	---	---	Closed out
(2)	Elk Ck	Washington	Muscatatuck Rvr	18,020	9/54	6/58	---	1/55	7/57	3	4	14 mi. Ch	3	4	14 mi. Ch
(92)	Fall Ck	Warren	Wabash Rvr	4,850	2/68	1/	1/71	1/71	9/73	---	---	Rec Fac & streambank protection	---	---	streambank protection
(103)	Feather Ck	Vermillion	Wabash Rvr	6,200	10/69	---	---	5/76	---	---	---	---	---	---	1 Planning underway
(33)	Flat Rock Ck	Allen & Adams IN, Van Wert & Paulding, OH	Auglaize Rvr, OH	128,000	5/60	11/66	2/66	1/66	---	---	---	---	---	---	Planning assistance terminated
(8)	French Lick Ck	Orange	Lost Rvr	21,880	5/56	3/60	2/59	11/56	7/60	3	1	5 mi. Ch	3	1	5 mi. Ch
(117)	Gallien Rvr	LaPorte & St. Joseph, IN & Berrien, MI		111,714	6/72	---	---	---	---	---	---	---	---	---	Comp. FY67, Total Cost - \$1,082,114
(118)	Gas Ck	Decatur	Sandcreek	2,801	6/72	---	---	---	---	---	---	---	---	---	Planning by Mich.
(100)	Goose Ck	Cass	Wabash Rvr	2,574	3/69	---	2/72	10/72	---	---	---	---	---	---	Unfeasible
(94)	Gordon Ck	DeKalb, IN, Paulding & Defiance, OH	Maumee Rvr, OH	28,224	3/68	---	---	---	---	---	---	---	---	---	Planning assistance terminated
(74)	Gresham Ck	Posey	Wabash Rvr	10,145	1/64	---	5/65	7/65	---	---	---	---	---	---	Planning by Ohio
(86)	Hall-Flat Ck	Dubois	Patoka Rvr	43,385	2/66	12/68	10/67	2/70	9/76	22	---	---	---	3	Est. Comp. FY84
(77)	Honey Ck	Vigo & Clay	Wabash Rvr	61,151	3/65	---	---	---	---	---	---	---	---	---	To be serviced
(93)	House-Bartee & Pulaski	Starke, Marshall & Pulaski	Wabash Rvr	23,700	2/68	---	---	---	---	---	---	---	---	---	To be serviced
(67)	Indian Ck	Brown, Morgan, Johnson & Monroe	W. Fk. White Rvr	59,160	4/63	---	12/63	4/64	8/66	8	2	2 basic Fac	---	---	CD in formation stage
1/ Sponsors- Williamsport Park and Recreation Board & Williamsport Town Board															
- 5 -															

Appl. No.	Watershed Name	Location (County/ies)	Tributary of	Size (Ac.)	Application Approved	Conservancy District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned	Completed	Other	Other		
(69) <u>1</u> (4)	Indian Ck Little Indian Ck	Harrison, Floyd & Clark	Ohio Rvr	163,077	7/63	12/68	10/65	11/65							Planning assistance terminated
(11)	Upper Iroquois Rvr	Jasper, White, Newton & Benton	Kankakee Rvr	233,982	9/57	6/60	4/60	8/60							Planning assistance terminated
(10)	Lower Iroquois Rvr	Newton, Benton, Jasper, IN & Iroquois, IL	Kankakee Rvr	228,152	9/57	6/60	4/60	8/60							Planning assistance terminated
(26)	Jordan Ck	Warren, IN	Vermillion Rvr, IL	35,123	5/64	2/69	9/67	4/69	6/76	50*	28mi. Ch, 5mi grassed waterways, 20mi. tile, 47mi. sur-face drains			3	Est. Comp. FY84
(114)	Porter Co.-Kankakee	Porter, Lake & LaPorte	Kankakee Rvr	151,570	1/71									1	Planning underway
(107)	Upper Kankakee Rvr	St. Joseph, La-Porte, Marshall, Starke, IN & Berrien, MI	Kankakee Rvr	234,287	7/70										To be serviced
(25)	Kickapoo Ck	Warren	Wabash Rvr	24,700	4/59	11/64	11/62	1/63	10/63			9 mi. Ch & Pump Sta.			Const. Comp. FY72 Cost - \$774,127
(115)	Killbuck Ck	Delaware & Madison	W. Fk. White Rvr	66,560	1/71										To be serviced
(20)	Lattas Ck	Greene	W. Fk. White Rvr	35,780	1/59	6/63	9/61	12/61	9/62			22 mi. Ch & 7 miles levees			Comp. FY72, Total Cost -\$1,763,886
(29)	Lewis Ck	Shelby	Big Flat Rock Ck	46,000	7/59		8/61								Appl. canceled
(5)	Little Patoka Ck	Crawford & Orange	Patoka Rvr	14,240	6/55		9/56								Appl. canceled
(49)	Upper Patoka Rvr	Crawford, Orange & Dubois	Wabash Rvr	175,360	6/62		11/63								Appl. canceled
(28)	Little Pigeon Ck	Warrick	Ohio Rvr	230,000	7/59										Appl. canceled
(16)	N. Fk. Little Pigeon	Spencer & Warrick	Ohio Rvr	17,500	10/58										Appl. canceled

1/ Applications were combined in 1963.

\* Grade Stabilization Structures



Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Application Approved	Conservancy District	Organized Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned	Completed	Other	Other		
										SP	MP	Other	SP	MP	Other
(57)	Little Pine Ck	Tippecanoe, Warren & Benton	Wabash Rvr	34,000	12/62										Appl. canceled
(42)	Little Raccoon Ck	Montgomery, Parke & Putnam	Big Raccoon Ck	98,306	7/61	5/65	6/62	8/63	9/65	13	3	2 Rec Fac & 43 mi. Ch	13	3	2 Rec Fac & 43 mi. Ch
(37)	Little River	Huntington, Allen, Wells & Whitley	Wabash Rvr	183,600	10/60		6/63	9/63							Planning assistance terminated
(60)	Little Walnut Ck	Putnam & Parke	Big Walnut Rvr	41,225	12/62	2/67	7/65	12/66	4/69	2	1	Rec Fac	2	1	3 Suppl. Comp. 4/ Est. Project Comp FY78
(23)	Little Wea	Tippecanoe & Montgomery	Big Wea Ck	11,960	3/59	1/63	12/61	3/62	9/62			9 mi. Ch			Comp. FY67, Total Cost - \$382,314
(12)	Log Lick Ck	Switzerland	Ohio Rvr	15,000	2/58										Unfeasible
(13)	Long-Amstutz Ditch	Adams	Wabash Rvr	3,200	10/58										Appl. canceled
(80)	Lost Ck	Vigo	Wabash Rvr	17,100	6/65										Inactive
(31)	Lost River	Orange, Martin, Washington, Lawrence & Dubois	E. White Rvr	233,690	5/60	10/66	7/63	1/66	9/70	8	2	44 mi. Ch			Est. Comp. FY80 2/ Suppl. Comp. 4/76
(82)	Lye Ck Drain	Montgomery	Lye Ck	12,900	6/65	3/	6/68	11/71	6/75			11 mi. Ch		1	mi. Ch 3 Est. Comp. FY80
(116)	Machler Ditch	LaPorte	Kankakee Rvr	36,400	1/72										To be serviced
(19)	Mariah Ck	Knox & Sullivan	Wabash Rvr	55,000	12/58										Inactive
(96)	Marie Delarme	Allen, DeKalb, IN & Defiance & Paulding, OH	Maumee Rvr	17,728	10/68										Planning by Ohio
(113)	Maxwell Drain	Carroll & Tippecanoe	Wabash Rvr	5,500	1/71										To be serviced

1/Negative Declaration filed on remaining channel work 5/76.

2/Revised EIS filed with CEQ 4/76.

3/Sponsor - Montgomery County Drainage Board

4/Negative Declaration filed with CEQ 8/77 for Rec Fac.

Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Application Approved	Conservancy District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned	Completed	Other	Other		
										SP	MP	Other	SP	MP	Other
(75)	McIntyre Ck	Clay	Eel Rvr	7,000	5/64										Inactive
(15)	Middle Fk. Anderson Rvr	Perry & Crawford	Ohio Rvr	69,400	10/58	12/59	10/58	3/59	8/61	2	4	12 mi. Ch	2		Est. Comp. - FY78 3 Suppl. Comp.
(27)	Middle Fk. Salt Ck	Brown & Bartholomew	Salt Ck	46,000	7/59										Unfeasible
(32)	Mill Ck	Hendricks, Owen Morgan & Putnam	Eel Rvr	187,136	5/60	4/67	7/62	10/62	10/65	12	2	52 mi. Ch			Inactive
(50)	Mill Ck-Fulton	Fulton & Putaski	Tippecanoe Rvr	34,080	6/62	12/65	11/63	2/64	4/65			16 mi. Ch			Str. meas. Comp. LT meas. continuing
(104)	Mill Ck-LaPorte	LaPorte	Kankakee Rvr	34,000	10/69										To be serviced
(63)	Upper Mississinewa	Delaware, Jay, Randolph, IN & Darke, OH	Wabash Rvr	218,500	4/63										Inactive
(64)	Lower Mississinewa	Grant, Jay, Delaware & Blackford	Wabash Rvr	225,815	4/63										Inactive
(39)	Muddy Fk. Silver Ck	Clark, Floyd & Washington	Silver Ck	42,642	5/61	8/65	9/62	1/63	8/65	3	4	Rec Fac, M&I Outlet & 13 mi. Ch	3	1	Est. Comp. FY78 3 Suppl. Comp.
(110)	New Waverly-Williams Ck	Cass	Wabash Rvr	3,053	9/70										To be serviced
(81)	Otter Ck	Vigo, Clay & Parke	Wabash Rvr	82,160	6/65		7/70								Inactive 2 yrs @ request of sponsors
(22)	Pigeon Ck	Vanderburgh, Warrick & Gibson	Ohio Rvr	230,000	4/59		3/64								Inactive
(76)	Pigeon Rvr	Steuben	St. Joseph Rvr	81,390	10/64	7/69	12/67								Inactive
(46)	Pipe Ck	Madison, Delaware & Hamilton	W. Fk. White Rvr	85,000	9/61		4/64								Unfeasible

Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Application Approved	Conservancy District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned	Completed	Other	Other		
								SP	MP	Other	SP	MP	Other		
(99)	Pony Ck	Huntington, Wabash & Whitley	Eel Rvr	21,500	1/69										Inactive
(3)	Prairie Ck	Daviess & Martin	E. Fk. White Rvr	88,690	9/54	2/59	3/56	10/55	5/58	15mi. Levees *47 mi. Ch	10	1	15mi. Levees *47 mi. Ch	---	Comp. FY70. Total Cost- \$4,663,489
(35)	Prairie Ck-Vigo	Vigo	Wabash Rvr	19,095	5/60	12/64	8/62	10/62	8/64	6 mi. Ch	3			3/	2 suppl completed. Est. proj. comp. FY79
(73)	Prides Ck	Pike	White Rvr	9,213	11/63	8/65	7/64	10/64	10/66	Rec Fac & 6 mi. Ch	2	1	Rec Fac	1	1 Suppl Comp. Project Comp. Undetermined
(111)	Robbins	Starke, St. Joseph, LaPorte & Marshall	Kankakee Rvr	58,680	11/70										To be serviced
(66)	Rock Ck-Cass	Cass & Carroll	Wabash Rvr	56,533	4/63	9/67	4/67	7/67	7/69	15 mi. Ch			1 mi. Ch	3/	Final contract. Est. proj. comp. FY79
(56)	Rock Ck-Well's	Well's & Huntington	Wabash Rvr	61,020	12/62	3/66	10/65	1/66	3/67	27 mi. Ch			27 mi. Ch	---	Const. Comp. LT measures continuing
(97)	St. Joseph of the Maumee	Steuben, IN, Williams, OH & Branch & Hillsdale, MI	Maumee Rvr	249,000	10/68										Inactive Planning by Mich
(51)	Salamonie Rvr	Jay, Wells & Blackford	Wabash Rvr	162,378	8/65		3/65	2/67							Planning Assistance terminated
(84)	Silver Ck	Clark, Floyd & Scott	Ohio Rvr	97,800	1/65		3/72								To be serviced
(78)	Snapp-Kelso	Knox	Wabash Rvr	16,000	4/65										To be serviced
(91)	Splunge Ck	Vigo & Clay	Eel Rvr	27,570	9/68										Inactive
(9)	Spring-Run-Griesel	Lake	Singleton Ditch	18,500	7/57										Appl. canceled
(18)	Stucker Fk.	Scott, Clark, Jefferson & Washington	Muscatatuck Rvr	117,850	1/59	4/64	12/60	6/61	9/62	26 mi. Ch	15		4 mi. Ch	2&4/	Suppl. Comp. - 4 Est. Comp.

\*Plus 10 grade stabilization structures

1/EIS on remaining work filed with CEQ, 12/75.

2/Questionable future because of surface mining.

3/EIS on remaining work filed with CEQ, 10/76

4/Negative Declaration filed for structures 13 &amp; 16. EIS will be prepared for remaining work.



Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Application Approved	Conservation District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned	Completed	Other	Other		
										SP	MP	Other	SP	MP	Other
(21)	Turman Ck	Sullivan	Wabash Rvr	70,000	1/59										Appl. canceled
(17)	Turtle Ck	Sullivan	Wabash Rvr	24,540	12/58		7/65	11/65							Planning assistance terminated
(48)	Twin-Rush Ck	Washington	E. Fk. White Rvr	28,099	6/62	8/64	12/63	2/64	4/65	2	1	WS Fac & 10 mi. Ch	1	1	Supplements - 3 Est. comp. FY78
(58)	Upper Big Blue Rvr	Henry & Rush	E. Fk. White Rvr	124,000	12/62	3/65	11/65	2/64	8/66	7	4	33 mi. Ch 2 Rec Fac	5	1	2** Est. comp. FY80 Supplements - 1
(79)	Upper Big Flat Rock	Rush, Henry & Fayette	E. Fk. White Rvr	135,000	5/65										Inactive
(53)	Upper Vernon Fork	Decatur, Ripley & Jennings	Muscatatuck Rvr	125,444	9/62	10/67	1/66	5/66							Planning assistance terminated
(54)	Lower Vernon Fork	Jackson & Jennings	Muscatatuck Rvr	139,005	9/62	10/67	1/66	7/66							Planning assistance terminated
(40)	Veale Ck	Daviess	W. Fk. White Rvr	24,516	5/61		6/65	8/65							Planning assistance terminated
(7)	West Ck	Lake, IN Wells & Kankakee, IL	Singleton Ditch	36,086	4/56	12/63	11/56	11/56	12/59						Closed Out
(61)	W. Boggs Ck	Daviess & Martin	Boggs Ck	14,030	2/63	1/	6/65	8/65	10/66	1		1 Rec Fac & 5 mi. Ch	1		Est. Comp. FY78
(62)	White Ck	Jackson, Brown & Bartholomew	E. Fk. White Rvr	64,360	3/63										Inactive
(89)	White Lick Ck	Boone, Morgan, Marion & Hendricks	W. Fk. White Rvr	182,503	5/67										To be serviced
(44)	Whitewater Rvr-Fayette	Fayette	Miami Rvr, OH	134,160	10/61	8/68	2/66	9/68							Court decision to dissolve CD pending
(45)	E. Fk. Whitewater Rvr	Wayne, Union, Fayette, Randolph, Franklin, IN & Darke & Preble, OH	Miami Rvr, OH	246,900	10/61	8/68	2/64	12/67	10/74	1	5	1 Ch Rec Dev. & 20 mi. Ch			Court decision to dissolve CD pending

\*Negative Declaration on single purpose FR structure filed with CEQ 4/76. Environmental assessment will be made of remaining work.

\*\*Negative Declaration on Structures 18, 19 &amp; 20 filed with CEQ 3/76. EIS will be prepared for remaining work.

1/Sponsors - Joint Daviess-Martin Park Board &amp; Boggs Creek Maintenance District



Appl. No.	Watershed Name	Location (County(ies))	Tributary of	Size (Ac.)	Application Approved	Conservancy District Organized	Preliminary Investigation Completed	Authorized for Planning	Authorized for Operations	Structural Measures				EIS (1,2,3,4)	Remarks and Notes
										Planned	Completed	SP	MP	Other	
(43)	Upper W. Fk. Whitewater Rvr	Fayette, Randolph, Wayne & Henry	Miami Rvr, OH	243,490	10/61	8/68	2/66	4/68							Court decision to dissolve CD pending
(85)	Windy Ck	Perry	Ohio Rvr	5,920	11/65										Unfeasible
(108)	Lower Yellow Rvr	Starke & Marshall	Kankakee Rvr	87,452	9/70										To be serviced
(109)	Upper Yellow Rvr	Marshall, St. Joseph, Elkhart & Kosciusko	Kankakee Rvr	185,300	9/70										To be serviced



## BACHELOR RUN CREEK PROJECT CARROLL AND HOWARD COUNTIES

The Project in Brief. Authorized - April 24, 1964. Estimated completion - in the fiscal year 1978. Area - 23,519 acres. Sponsors - Bachelor Run Conservancy District and Carroll County Soil and Water Conservation District. Estimated total cost - \$869,516 (\$460,139 PL-566 and \$409,377 Other). Principal problems - floodwater and detrimental effects of excess water on the surface and internal drainage of agricultural land and flooding in the town of Flora. Landownership and use - 60 percent owner-operated; 40 percent tenant-operated; 21,000 acres cropland, 600 acres grassland, and 1,000 acres woodland.

Progress in Land Treatment. Landowners involved - 195 farms, of which 168 are cooperators; 162 have basic conservation plans. Emphasis during the past eight years has been on planning and installing group projects. The application of group land treatment work has been dependent on securing an adequate drainage outlet which is being provided by the main channel reconstruction. Estimated cost of land treatment - \$281,916, of which \$40,037 is for technical assistance.

Progress in Structural Measures. The first unit of construction was completed in October 1968 (4.1 miles of channel work). To date, 13.4 miles of channel work, six grade stabilization structures, a pumping plant, and 2,000 feet of open channel have been completed; 5.8 acres of wildlife plantings have also been completed in connection with related structural measures. Construction on the next 4.2 miles of channel work will resume as soon as easements are secured and funds are available. Total structural measures include the six grade stabilization structures, the pumping plant, 2,000 feet of open channel, and 20.6 miles of channel work. Estimated cost of structural measures - \$587,600 (\$424,534 PL-566 and \$163,066 Other).

Progress in Obtaining Easements and Rights-of-Way. The Bachelor Run Conservancy District is presently working to obtain easements for the next unit of work (4.2 miles of channel work). Environmental mitigation requirements have increased the difficulty of obtaining easements.

Effectiveness of Project Proved. The channel work completed to date has effectively contained all storm flows. This includes storms of up to 4 inches of rainfall which have occurred over the watershed. The completed channel has also provided an adequate outlet for the storm sewers of the town of Flora and for several other previously poorly drained areas. Little flooding has occurred in these areas since the channel was reconstructed. The reconstructed channel is providing a good outlet for agricultural drainage. Fewer crop damages are evident. Wildlife is abundant in the reconstructed portions of the channel. A different type habitat (more grassland) has induced a greater variety of small game.

## BAILEY - COX - NEWTSON PROJECT STARKE COUNTY

The Project in Brief. Authorized - September 1976. Estimated completion in the fiscal year 1982. Area - 12,070 acres (11,870 acres privately owned, 200 acres owned by Starke County Airport Authority). Sponsors - Starke County Soil and Water Conservation District and the Bailey-Cox-Newtson Conservancy District. Total estimated cost - \$1,470,560 (\$675,450 PL-566 and \$795,110 Other). Principal problems - floodwater damage, inadequate land and water management, erosion, inadequate drainage and droughty soil conditions. Landownership and use - 9,910 acres cropland; 390 acres pastureland; 480 acres woodland, and 1,290 acres of other land.

Progress in Land Treatment. Of the approximately 107 farms, 33 landowners have agreements with the Starke County Soil and Water Conservation District. Of these 30 have conservation plans. The entire watershed has a progressive soil survey. Major conservation practices planned are conservation cropping system, crop residue use, surface drainage, grade stabilization structures, minimum tillage, and subsurface drains. Total estimated cost of land treatment - \$338,670, of which \$33,830 is for technical assistance.

Progress in Structural Measures. Structural measures consist of 26.2 miles of multiple purpose flood prevention and drainage work (19.0 miles of deepening and/or enlargement and 7.2 miles of selective cleaning only), 6,900 lineal feet of dike, a pump station at the watershed outlet, 14 structures for water control, and a 14-acre area for northern pike spawning. No structural measures have been started. Estimated cost of structural measures - \$1,098,060 (\$655,720 PL-566 and \$442,340 Other cost).

Progress in Obtaining Easements and Rights-of-Way. The original application for the Bailey-Cox-Newtson Conservancy District was approved by the Indiana Natural Resources Commission on May 15, 1972. Easements and rights-of-way to perform planned structural measures will be provided or acquired by the Conservancy District.

## **BIG RACCOON CREEK PROJECT MONTGOMERY, PUTNAM, BOONE, PARKE, AND HENDRICKS COUNTIES**

The Project in Brief. Authorized - April 1, 1969. Estimated completion - undetermined. Area - 133,120 acres. Sponsors - Montgomery, Putnam, Parke and Boone soil and water conservation districts and the Big Raccoon Creek Conservancy District. Estimated total cost - \$4,601,359 (\$1,835,617 PL-566 and \$2,765,742 Other). Principal problems - flooding damage to crops, pastures, roads and bridges, urban properties, and flood plain land. A large storm causes flooding of up to 4,840 acres. Landownership and use - privately-owned except for Mansfield Reservoir (Corps of Engineers structure in the watershed area), which has 5,115 acres of federally-owned land, and Raccoon Creek recreational area which has 200 acres of state-owned land; 95,086 acres cropland, 20,235 acres grassland, 13,998 acres woodland and 3,801 acres other land.

Progress in Land Treatment. Landowners involved - 800 farms averaging 166 acres; 48 percent of landowners are district cooperators and 37 percent of landowners have basic conservation plans. An estimated 49 percent of necessary land treatment has been accomplished. Planned land treatment measures include conservation cropping systems, grassed waterways, ponds, grade stabilization structures, diversions, crop residue use, pasture planting, woodland protection and installation of open and closed drains. Estimated cost of land treatment - \$4,165,595, of which \$472,226 is for technical assistance and soil survey.

Progress in Structural Measures. None of the planned project measures has been installed. The Big Raccoon Conservancy District, viable sponsor of the project, was dissolved by election in accordance with the 1977 amendment to the Indiana Conservancy Act (Senate Bill 490).



## BUSSEYON PROJECT SULLIVAN, VIGO, CLAY, AND GREENE COUNTIES

The Project in Brief. Authorized - June 1958. Estimated completion - in the fiscal year 1979. Area - 153,000 acres (all privately-owned except approximately 1,726 acres state-owned in Shakamak Park and 1,177 acres in Sullivan County Park and Lake.) Sponsors - Sullivan, Clay, Greene and Vigo county soil and water conservation districts, Indiana Department of Natural Resources, Busseron Conservancy District and Sullivan County Park and Recreation Board. Principal problems - floodwater and sediment damage to agricultural lands, state and county roads and bridges, utilities, and pollution from strip mines. Landownership and use - 11.9 percent tenant operated; 82,940 acres cropland - 54.1 percent, 20,470 acres grassland - 13.4 percent, 18,190 acres woodland - 11.8 percent, 7,230 acres idle - 4.2 percent, 24,450 acres miscellaneous - 16 percent (includes extensive strip mines in area).

Progress in Land Treatment. Approximately 450 farms in watershed. Goal for district cooperators has been exceeded. Completion of conservation plans is in line with planned accomplishments. The goals for terracing and tiling have been achieved. Progress in agronomic practices is being made. Progress is also being made in erosion control practices.

Progress in Structural Measures. Twenty-one of the planned 26 structures have been completed at a PL-566 cost of \$1,716,634. Two were multi-purpose recreation and flood control structures. Expansion of recreation facilities on both multi-purpose structures was completed this year. Additional new camp sites are to be installed at Lake Sullivan this year. Eight and eight-tenths miles of planned 53 miles of channel have been completed at a PL-566 cost of \$65,294.

Progress in Obtaining Easements and Rights-of-Way. The total cost of land easements and rights-of-way for the completed structures, two recreation facilities and 8.8 miles of channel was \$566,991 of which \$231,294 was PL-566. A Farmers Home Administration loan docket for long-range financing has been funded. Part of the first phase of this loan, in the amount of \$158,200, was used by the Conservancy District to obtain land rights on Structure F-1.

### Case Histories of Watershed Project Benefits.

Flood Damage Reduction. The 21 installed structures helped control flooding that would have otherwise occurred. After heavy rains fell, clear water was noted to run from many of the mechanical spillways of the structures.

Recreation. The use of the Sullivan County Park and Lake is continuing to increase. The energy crisis has not curtailed the camping activities this year. One 65-acre home development with sewer and water facilities shows steady growth which enhances the local tax base. Local businesses are enjoying an increase in sales from tourists and campers. The multi-purpose structure at Shakamak State Park is an excellent facility. The recreation potential has been greatly increased.

Fish and Wildlife. Fishing reports from the two multi-purpose structures have been excellent. Good catches of bass, crappie, bluegill and channel catfish have been reported this year. Wild ducks are seen on the lake many months of the year.

Local Reaction. The overall reaction is positive. Many local citizens are enjoying the benefits of the watershed project as well as the visitors.

Economics. It is interesting to note that the lake is paying for itself if the loan repayment is not taken into effect. This excludes the income from the increased tax base around the lake. Most of the houses there range between \$50,000 and \$100,000.



## DELANEY CREEK PROJECT WASHINGTON COUNTY

The Project in Brief. Authorized - April 1, 1969. Estimated completion in the fiscal year 1977. Area - 21,905 acres of which approximately 70 percent are privately-owned. Sponsors - Washington County Soil and Water Conservation District, Delaney Creek Conservancy District, Washington County Park and Recreation Board, and the Indiana Department of Natural Resources Division of Forestry. Estimated total cost of construction - \$2,770,211 (\$1,888,096 PL-566 and \$882,115 Other). Principal problems are floodwater damage and land scour to farmland and roads. Land-ownership and use - 3,285 acres of cropland, 1,095 acres of grassland, 16,667 acres of woodland and 970 acres - idle and miscellaneous.

Progress in Land Treatment. There are 126 farms in the watershed, of which 55 are cooperators, covering 15,812 acres. Fifty-eight cooperators have basic conservation plans on 13,578 acres. The conservation practices to be installed include improved rotations, grassed waterways, diversions, gully stabilization, pasture renovation, tree planting, and improved forestry practices.

Progress in Structural Measures. Of the original five planned structures all have been completed. Contract on Structure 5 recreation facilities is expected to be awarded by January 1978. Seven additional structures have been planned to reduce the need for channel work. Construction on these structures is expected to start in 1978.

Progress in Obtaining Easements and Rights-of-Way. The County Park and Recreation Board has obtained land rights on Structure #5.

## FALL CREEK PROJECT WARREN COUNTY

The Project in Brief. Authorized - November 26, 1973. Estimated completion - in fiscal year 1980. Area - 4,850 acres. Sponsors - Warren County Soil and Water Conservation District, Williamsport Board of Parks and Recreation and the Williamsport Town Board. Estimated total cost - \$674,060 (\$133,600 PL-566 and \$540,460 Other). Principal problems - upland erosion, stream bank erosion, flooding, and lack of recreational facilities. Landownership and use - 98 percent of the land is privately owned and 2 percent of the land is owned by units of city and county government; 57 percent of the watershed is cropland, 25 percent pastureland, 5 percent forest land, 4 percent wildlife and recreation land, and 9 percent other land. The estimated population of the watershed is 1,770, of which 6 percent live on farms.

Progress in Land Treatment. Landowners involved - 33 farms wholly or partially in the watershed; 22 of the landowners (involving 80 percent of the watershed area) are cooperators and 18 have conservation plans. An estimated 65 percent of the needed land treatment measures have been applied. Planned land treatment includes conservation cropping systems, crop residue management, minimum tillage, grassed waterways, grade stabilization structures, pasture planting and management, wildlife habitat management, etc. Estimated cost of land treatment - \$43,830, of which \$10,175 is for technical assistance.

Progress in Structural Measures. Planned structural measures are one multiple-purpose flood prevention-recreation structure with associated recreation facilities and 150 feet of streambank protection in Williamsport. The streambank protection work was completed in FY 1977. Geological investigations and field surveys for the multiple-purpose structure have been completed. Estimated cost of structural measures - \$630,230 (\$125,840 PL-566 and \$504,390 Other).

Progress in Obtaining Easements and Rights-of-Way. Land rights maps for the multiple-purpose structure have been prepared by the Soil Conservation Service and furnished to the sponsors. The sponsors are working with the Indiana Department of Natural Resources, the Department of Housing and Urban Development and the Farmers Home Administration to secure needed grants and loans to finance the local costs of the project. A study committee for community development in Warren County is studying the feasibility of the multiple-purpose structure with recreation facilities being considered as a county park.

## HALL-FLAT CREEK PROJECT DUBOIS COUNTY

Project in Brief. Authorized in September 1976. Estimated completion - in fiscal year 1984. Area - 43,107 acres. Sponsors - Hall-Flat Creek Conservancy District and Dubois County Soil and Water Conservation District. Estimated total cost - \$2,912,127 (\$2,170,790 PL-566 and \$741,337 Other). Landownership and use - 94 percent owner-operated; 6 percent tenant-operated; 16,000 acres cropland, 10,000 acres woodland, 13,000 acres grassland. Principal problems - flood-water damage to crops, pastures, other agricultural properties, roads and bridges. These damages are associated with storms which generally occur two to three times per year. Sheet erosion occurs throughout the upland areas and accounts for 98 percent of total erosion in the watershed. Approximately 87 percent of the watershed soils have erosion hazards. Some minor channel fill occurs through sediment damage and some overbank deposits may be found. Approximately 70 percent of the watershed flood plain soils are imperfectly drained which limits production. Increased pressure for food production has resulted in a tendency of watershed landowners to crop erosion prone slopes beyond their capabilities resulting in excessive erosion.

Progress in Land Treatment. Landowners involved - 310, of which 126 are cooperators and 61 have basic conservation plans. Considerable channel work for improved drainage outlets has been done on individual farms. Estimated cost of land treatment - \$562,217, of which \$177,056 is for technical assistance.

Progress in Structural Measures. Structural measures consist of 22 single-purpose flood prevention structures. No structural measures have been started. Estimated cost of structural measures - \$2,348,910 (\$2,017,434 PL-566 and \$331,476 Other).

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District Plan was approved by the Natural Resources Commission on May 25, 1977. Land rights maps are in the process of being prepared.



## INDIAN CREEK PROJECT MORGAN, JOHNSON, BROWN, AND MONROE COUNTIES

The Project in Brief. Authorized - August 31, 1966. Estimated completion - undetermined. Area - 59,160 acres. Sponsors - Morgan, Johnson, Brown and Monroe county soil and water conservation districts. Estimated total cost - \$3,208,500 (\$1,204,499 PL-566 and \$2,004,001 Other). Principal problems - erosion and drainage problems in the uplands, flooding and drainage problems in the bottomlands, and water management problems throughout the watershed. Additional recreational facilities are also needed. Landownership and use - 3,685 acres state-owned land (no federally-owned land), balance privately-owned; 22,170 acres cropland, 9,570 acres pastureland, 20,990 acres woodland, and 6,430 acres miscellaneous.

Progress in Land Treatment. Landowners involved - 600 farms averaging 90 acres; approximately 51 percent of the land is now under district cooperative agreement. Approximately 63 percent of the co-operators now have basic conservation plans on 27 percent of the total area in the watershed. Land treatment measures to be installed are those having the most hydrologic, erosion and sediment control significance in reducing floodwater damage and those which contribute to achieving agricultural water management benefits. Total estimated cost of land treatment - \$1,102,000, of which \$340,480 is for technical assistance.

Progress in Structural Measures. Planned structural measures are 8 floodwater retarding structures and 2 multiple-purpose structures (including basic recreation facilities). No structural measures have been installed. Land rights maps will be developed after formation of the conservancy district.

Progress in Obtaining Easements and Rights-of-Way. Petitions for conservancy district formation were filed in Morgan County Circuit Court in December 1967, but later withdrawn by the steering committee. The court refused to reinstate the petitions at a later date. The steering committee has obtained necessary signatures of landowners (plus 30 percent) on new petitions which have been filed with the court. Court proceedings with a special judge from Monroe County are in process. Opposition petitions to the formation of the conservancy district have been filed. The court is currently determining validity of landowner signatures on all petitions filed. The first hearing on the second set of petitions was on April 19, 1973. Auditors of involved counties were to determine validity of the signatures and report back to the court. There has been no action to date on formation of the conservancy district. Land easements and rights-of-way will be obtained following formation of the conservancy district.

## JORDAN CREEK PROJECT WARREN COUNTY

The Project in Brief. Authorized for planning in April, 1969, and approved for operations July 2, 1976. Estimated completion - in fiscal year 1986. Area - 35,123 acres. Sponsors - Warren County Soil and Water Conservation District and Jordan Creek Conservancy District. Estimated total cost - \$2,528,470 (\$1,181,160 PL-566 and \$1,347,310 other). Principal problems - floodwater damage, drainage problems, and erosion and sediment damage. Landownership and use - major portion of land is privately-owned and used agriculturally; 94.5 percent for cropland (33,200 acres), 1.8 percent for pasture (640 acres), 0.1 percent for woodland (25 acres), and 3.6 percent for other (1,260 acres). The estimated population within the watershed is 704, of whom 93 percent live on farms.

Progress in Land Treatment. Landowners involved - 184 farms wholly or partially in the watershed; 122 of the landowners (28,724 acres) are cooperators with the Warren County Soil and Water Conservation District and 77 of the landowners have basic conservation plans (19,207 acres). An estimated 20 percent of the needed land treatment measures have been applied. Planned land treatment includes contour farming, terraces, diversions, minimum tillage, grassed waterways or outlets, grade stabilization structures, subsurface drains, drainage mains or laterals, and wildlife habitat management. Estimated cost of land treatment - \$754,280, of which \$60,440 is for technical assistance.

Progress in Structural Measures. Planned structural measures are 1.5 miles of debris removal on main channel, 12.2 miles of multi-purpose flood prevention and drainage channel work, 14.7 miles of new or reconstructed open ditches, 46.7 miles of surface drains, 5.1 miles of grassed waterways, 19.8 miles of subsurface drains in conjunction with surface drains and grassed waterways, and approximately 50 grade stabilization structures. Estimated cost of structural measures - \$1,774,190 (\$1,162,520 PL-566 and \$611,670 Other).

Progress in Obtaining Easements and Rights-of-Way. Land rights maps for the first unit of work (Reach J) have been prepared by the Soil Conservation Service and furnished to the sponsors. The sponsors have already acquired (through donation) three of the needed five easements for this first unit of work and expect to sign the Project Agreement prior to October 1, 1977.

## **LITTLE RACCOON CREEK PROJECT PARKE, MONTGOMERY, AND PUTNAM COUNTIES**

The Project in Brief. Authorized - September 10, 1965. All structural measures were completed August 1977. Area - 98,306 acres. Sponsors - soil and water conservation districts of Parke, Montgomery and Putnam Counties and the Little Raccoon Creek Conservancy District. Estimated total cost - \$4,444,720 (\$2,891,970 PL-566 and \$1,552,750 Other). Principal problems - damage to crops and pastures from flooding, land damage in the flood plain, upland erosion and lack of recreational facilities. Landownership and use - 65 percent owner-operated, 35 percent tenant-operated; 66,523 acres cropland, 9,240 acres pastureland, 16,750 acres woodland and 5,793 acres - other land.

Progress in Land Treatment. Landowners involved - 609. Approximately 92 percent of the total area is under district cooperator agreement and about 72 percent is under conservation plan. Major practices planned are pasture planting, ponds, diversions, waterways, conservation crop systems, crop residue use, tile, open drains and woodland improvement. Approximately 87 percent of the needed land treatment measures has been completed. Land treatment measures were needed on 23,125 acres cropland, 4,200 acres grassland, 9,390 acres woodland and 1,830 acres other land. Estimated cost of land treatment - \$755,385, of which \$317,995 is for technical assistance.

Progress in Structural Measures. All structural measures have been completed: 16 structures (13 single-purpose, 2 multiple-purpose flood prevention-public recreation and 1 multiple-purpose flood prevention-private recreation), 2 recreational facilities, and 43 miles of limited channel work. Multiple-purpose structure No. 8 with a 360-acre permanent pool and associated recreation area with facilities was opened to the public on Memorial Day weekend in 1972. Recreation facilities are operated by the Waveland Park Board. Multiple-purpose structure No. 2C, with a 100-acre permanent pool and a 100-acre recreation area, was dedicated May 27, 1973; recreation facilities are operated by the Parke County Park Board. Both are receiving wide usage. Estimated cost of structural measures - \$3,689,340 (\$2,704,380 PL-566 and \$984,960 Other). Final costs have not been determined.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District acquired all necessary easements.

Effectiveness of Project Proved. In June 1973 a storm brought 3 to 5 inches of rain in a short period of time. All 11 structures functioned as planned and effectively protected several thousand acres of corn, beans and small grain from serious flooding. Structure 2C, which controls only about one-half of the drainage area above Pioneer Village (Billie Creek), also protected the village from the extensive damage which would likely have occurred without the dam. The village was also spared two other serious floods: once in late July 1971 when the structure was only partially completed and a 4.5-inch rain fell in about an hour and once in June 1972 when a 2.5-inch rain fell in 30 minutes. The completed measures have effectively protected the valley from serious flooding.



## **LITTLE WALNUT CREEK PROJECT PUTNAM AND PARKE COUNTIES**

The Project in Brief. Authorized - April 1969. Estimated completion - in the fiscal year 1978. Area - 41,225 acres. Sponsors - Putnam County Soil and Water Conservation District and the Little Walnut Creek Conservancy District. Estimated total cost - \$2,020,751 (\$1,170,541 PL-566 and \$850,210 Other). Principal problems - damage from flooding to crops and pastures, roads and bridges, and damage from scour and sediment deposition in the flood plain. Landownership and use - major portion of land is privately-owned and used agriculturally; 50 percent used for cropland, 22 percent for pasture, 25 percent for woodland and 3 percent for other land.

Progress in Land Treatment. Landowners involved - 256 farms wholly or partially within the watershed; 127 of the landowners (involving 27,958 acres) are cooperators with the Putnam County Soil and Water Conservation District and 118 the landowners have basic conservation plans involving 21,469 acres. An estimated 75 percent of needed land treatment measures have been applied. Planned land treatment includes conservation cropping systems, grassed waterways, ponds, diversions, grade stabilization structures, crop residue use, pasture planting, woodland protection and installation of open and closed drains. Estimated cost of land treatment - \$494,301, of which \$118,670 is for technical assistance and soil surveys.

Progress in Structural Measures. Planned structural measures are two single-purpose floodwater retarding structures and one multiple-purpose flood prevention recreation structure. All structures have been completed. Estimated cost of structural measures - \$1,526,450 (\$1,051,871 PL-566 and \$474,579 Other). Actual cost of project to date has been \$913,627 PL-566 for construction and land rights, and \$679,458 "Other" costs for construction, land rights and operation of the Conservancy District.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District was established by Putnam County Circuit Court on March 10, 1967. The Conservancy District Plan was approved by the Indiana Natural Resources Commission. The Conservancy District has acquired all needed land rights and is currently investigating means to bring about the installation of planned recreation facilities at multiple-purpose structure No. 4. A boat ramp and parking lot have been constructed by the Conservancy District but were not part of the plan.

Effectiveness of Project Proved. Severe rainstorms during 1972, 1973, 1974, 1975 and during spring of 1976 have severely tested the two single-purpose structures completed. Both structures functioned as planned. Flooding was materially reduced and significantly reduced damages to crops, county roads and bridges, and farmland.



## LOST RIVER PROJECT DUBOIS, LAWRENCE, MARTIN, ORANGE, AND WASHINGTON COUNTIES

The Project in Brief. Authorized September 29, 1970. Estimated completion in the fiscal year 1980. Area - 233,690 acres - 220,325 acres privately-owned, 12,200 acres federally-owned and managed by U.S. Forest Service, 1,125 acres state-owned and managed by the Indiana Department of Natural Resources. Sponsors are the soil and water conservation districts of Dubois, Lawrence, Martin, Orange and Washington Counties, the Lost River-Springs Valley Conservancy District, the Orange County Park and Recreation Board, and the town of Paoli. Estimated total cost for structural measures and land treatment - \$9,979,365 (\$4,662,666 PL-566 and \$5,316,699 Other). Principal problems - floodwater and sediment damage to agricultural lands, increased operating costs and disruption of travel because of road and bridge flooding and damage. Land use - 35 percent cropland, 28 percent pasture, 26 percent woodland, and 11 percent other uses.

Progress in Land Treatment. There are 1,140 farms in the watershed with 623 district cooperators of which 429 have complete conservation plans. An estimated 64 percent of the planned practices have already been applied.

Progress in Obtaining Easements and Rights-of-Way. The Lost River-Springs Valley Conservancy District has had a tax levy for the past four years and has approximately \$72,500 in Certificates of Deposit in local banks within the watershed area. The tax levy was taken off for calendar year 1977.

Present Status. The supplement to the work plan was approved by the State Conservationist and the final environmental impact statement filed with the Council on Environmental Quality in April 1976. The amended District Plan was approved by the Natural Resources Commission in August 1976. The Orange County Circuit Court approved the amended District Plan and charged the Lost River-Springs Valley Conservancy District with proceeding with installation. Project is presently held up by a Washington review called for by the Indiana Congressional Delegation.

## LYE CREEK DRAIN PROJECT MONTGOMERY COUNTY

The Project in Brief. Authorized - June 6, 1975. Estimated completion - the fiscal year 1980. Area - 13,035 acres. Sponsors - Montgomery County Soil and Water Conservation District and the Montgomery County Drainage Board. Estimated total cost - \$526,540 (\$324,230 PL-566 and \$202,310 Other). Principal problems - inadequate land and water management, floodwater damage, erosion and inadequate drainage. Landownership and use - privately-owned; 11,315 acres cropland, 891 acres grassland, 129 acres woodland and 700 acres other land.

Progress in Land Treatment. Landowners involved - 100 farms of which 40 are cooperators with the Montgomery County Soil and Water Conservation District. Of these, 25 have adequate basic conservation plans. Major conservation practices planned are contour farming, grassed waterways, minimum tillage, crop residue use, grade stabilization structures, conservation cropping systems, subsurface drains, drainage mains and laterals, pasture and hayland planting and management, tree planting, and forest land management. Total estimated cost of land treatment - \$34,770, of which \$3,340 is for technical assistance.

Progress in Structural Measures. Planned structural measures are 11.3 miles of multiple-purpose flood prevention and drainage channel work, of which 10.2 miles will include deepening and enlargement and 1.1 miles will include only debris removal. All work will be performed on intermittent, manmade or modified channel. The first unit of work is under construction. Work has been completed on 1 mile of channel and is progressing on another 4 miles. The county has installed 2 new bridges. Estimated cost of structural measures - \$491,770 (\$320,880 PL-566 and \$170,890 Other).

Progress in Obtaining Easements and Rights-of-Way. The original application for the Armentrout Drain Ditch was approved by the Indiana Natural Resources Commission on June 15, 1965. The amended application for Lye Creek Drain was approved by the Commission on March 1, 1971. The Drainage Board is acquiring easements and rights-of-way for the second unit of work. The major portion of improvement work will be done within the Board's 75-foot right-of-way established by the Indiana Drainage Code. Additional rights-of-way will be acquired as needed or determined.

## MIDDLE FORK OF ANDERSON RIVER PROJECT PERRY AND CRAWFORD COUNTIES

The Project in Brief. Authorized - August 28, 1961. Estimated completion in the fiscal year 1978. Area - 69,400 acres (55,315 acres privately-owned, 13,117 acres owned by U.S. Forest Service, 968 acres owned by Indiana Department of Natural Resources). Sponsors - soil and water conservation districts of Perry and Crawford Counties and the Middle Fork Watershed Conservancy District. Estimated total cost - \$4,446,856 (\$1,590,078 PL-566 and \$2,856,788 Other). Principal problems - floodwater sediment and erosion damage to agricultural lands, and indirect damages in form of depreciation in land values, increased operating costs and disruption of travel because of road and bridge flooding and damage. Landownership and use - 90 percent owner-operated; 17,300 acres cropland, 15,604 acres grassland, 31,900 acres woodland. Over 50 percent are part-time farmers.

Progress in Land Treatment. Over 95 percent of the planned land treatment measures are now applied. There are 350 farmers in the area of which 345 are cooperators. Of the estimated 1,000 acres of tree planting needed on the watershed critical areas, 1,461 acres have been planted. Trees were furnished to the landowners through the RC&D Program. Land treatment was given first priority for REAP cost-share assistance. Over \$125,000 has been spent for REAP assistance since watershed project started.

Progress in Structural Measures. Of the planned 34 miles of channel work, 5 miles of Kraus Creek were completed in 1966. Multiple purpose Lake Celina (155 acres) was completed in 1968. Four other multiple-purpose structures were completed prior to 1968. Recreation facilities have been completed on Saddle Lake by the U.S. Forest Service. Road building and recreation facilities, including beach, have started on Tipsaw. Public access road to Indian Lake and Lake Celina is completed. Campgrounds were opened for use during summer of 1975 on Celina. Boat ramp on Celina was completed summer of 1977. The 1.3 miles of channel work on Winding Branch and 5.6 miles of Unit 1 of the Middle Fork main channel are complete.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District has obtained easements for 29 miles of channel work on Middle Fork, Sulphur and Theis creeks.

Effectiveness of Project Proved. The watershed received heavy steady spring rainfall during the spring of 1973 totaling 22 inches and the structures held back the excessive bottomland flow very successfully. Six to 6 1/2 inches of rain in 48 hours April 23-25, 1975, caused both emergency spillways on structures 2 and 4 to flow. Structure No. 7 was within a foot of the lowest spillway. Some flooding occurred but damage was minimal. Construction of Interstate 64 has been completed.



## MUDDY FORK OF SILVER CREEK PROJECT CLARK, FLOYD, AND WASHINGTON COUNTIES

The Project in Brief. Authorized - August 12, 1965. Estimated completion - in the fiscal year 1978. Area - 42,642 acres (86 percent privately-owned, 14 percent state forest). Sponsors - Clark, Floyd, and Washington county soil and water conservation districts, Town Board of New Providence, and the Muddy Fork Conservancy District. Estimated total cost - \$2,606,369 (\$1,824,251 PL-566 and \$782,118 Other). Principal problems - floodwater and sediment damage to agricultural lands, residences, and utilities. Landownership and use - 60 percent part-time and 25 percent tenant farmers; general farming with emphasis on fruit and vegetable crops and small grain, 7,751 acres cropland, 2,902 acres grassland, 29,595 acres woodland, and 2,394 acres miscellaneous.

Progress in Land Treatment. Of the approximately 400 landowners, 191 are district cooperators (26,267 acres - 66 percent), and 175 have conservation plans (23,871 acres - 56 percent of the area). Over 80 percent of the land treatment practices have been applied. The following practices are 100 percent applied or over: contour farming, drainage mains and laterals, farm ponds, minimum tillage, pasture and hayland management, pasture and hayland planting, open drains, tile, tree planting, trough or tanks, wildlife habitat management and woodland improved harvesting. The following conservation practices are over 75 percent complete: conservation cropping system, crop residue use and terrace gradient. There are 17,287 acres which are adequately treated (85 percent of the goal). The land treatment program will be installed ahead of schedule. Estimated cost of land treatment is \$314,980.

Progress in Structural Measures. Structures numbered 1, 2, 3 and 5 are completed and operating. Structure No. 1 is a multi-purpose flood control and water supply structure. The structure provides water to the town of New Providence and over 800 customers of the Tri-County Water Corporation. The other structures (2, 3 and 5) are flood control only structures. All structural work has been temporarily halted pending completion of a work plan supplement.



## PRAIRIE CREEK PROJECT VIGO COUNTY

The Project in Brief. Authorized - August 19, 1964. Estimated completion - in the fiscal year 1979. Area - 19,095 acres (99.5 percent privately-owned). Sponsors - Vigo County Soil and Water Conservation District and the Prairie Creek Conservancy District. Total revised cost - \$1,416,342 (\$792,292 PL-566 and \$624,050 Other). Principal problems - floodwater and sediment damage to agricultural lands. Landownership and use - 13,260 acres cropland; 2,440 acres grassland; 1,800 acres woodland and 350 acres idle and miscellaneous.

Progress in Land Treatment. Of the approximately 200 farmers in the watershed, 160 have agreements with the Vigo Soil and Water Conservation District. Of these, 155 have conservation plans. Approximately 90 percent of the major planned land treatment measures have been applied. Estimated cost of land treatment is \$438,656.

Progress in Structural Measures. All three planned floodwater retarding structures have been installed. Structure No. 2 was completed late in 1967; Structure No. 1 was completed in October 1970; and Structure No. 3 was completed in September 1973. Construction on five miles of channel started in May 1977 with a 360-day scheduled completion date.

Effectiveness of Project Proved. Several times during the 1973-74 winter the area received intense rains. Due to channel congestion flooding occurred along the main stem. Floodwaters topped the road at bridges two and three. The flooding of agricultural land was evident during much of February and March. This flooding persisted due to maximum discharge of Structures 1 and 2 with inadequate channel capacity downstream. Even though flooding occurred to agricultural ground, several thousand dollars in benefits were received to county roads and bridges and to landowners as a result of the three floodwater retarding structures.

## PRIDES CREEK PROJECT PIKE COUNTY

The Project in Brief. Authorized - October 1966. Estimated completion - in the fiscal year 1978. Area - 9,213 acres (100 percent privately-owned). Sponsors - Pike County Soil and Water Conservation District and Prides Creek Conservancy District. Estimated total cost - \$1,232,400 (\$775,457 PL-566 and \$456,943 Other). Principal problems - floodwater and sediment damage to agricultural land and recreational development. Land use - 61 percent cropland, 10 percent grassland, 8 percent woodland, 10 percent idle land, 6 percent farmsteads and roads and 5 percent urban.

Progress in Land Treatment. More than 69 percent of the planned land treatment measures have been applied. Of the 92 farmers in the project, 70 are cooperators and 65 have conservation plans. Of the 12,000 feet of diversions needed, 1,500 feet have been constructed. Of the 18,000 feet of field drainage ditch needed, 13,500 feet have been constructed. Of the 23 farm ponds needed, 24 have been constructed. Estimated total cost of land treatment is \$173,600.

Progress in Structural Measures. Structural measures consist of two floodwater retarding and one multi-purpose recreation structures and 6.2 miles of channel work. Estimated cost of structural measures is \$1,103,000 (\$757,500 PL-566 and \$345,500 Other). The multi-purpose structure and recreation facilities were completed in June 1972. Survey, design and plans have been completed on the two flood retarding structures. The Prides Creek Conservancy District is proceeding with plans for snagging and debris removal on about 3 miles of channel from the White River to State Road 57.

Progress in Obtaining Easements and Rights-of-Way. Land rights maps have been presented to the Conservancy District on all structures and the channel. The Conservancy District purchased 260 acres needed for Structure No. 4 and the recreational facilities. Cost of obtaining easements and rights-of-way has delayed the construction of Structures 1 and 2. Land easement costs have been influenced by surface coal mining operations in the watershed and near Structures 1 and 2. All of Structure No. 1 site has been purchased by coal interests and may be surface mined. The Conservancy District has contacted the coal company to encourage flood control as part of their reclamation work. The Conservancy District is obtaining easements on 3 miles of channel for maintenance purposes.

Effectiveness of Project Proved. The land treatment phase has helped in controlling erosion and reducing flooding in the watershed. There is a noticeable difference in flooding below Structure No. 4 to the main channel. Part of this area is now an industrial park. Three industries have started operations in this protected area since Structure No. 4 has been completed.

## ROCK CREEK PROJECT CASS AND CARROLL COUNTIES

The Project in Brief. Authorized - July 3, 1967. Estimated completion - in the fiscal year 1980. Area-56,000 acres, all privately-owned. Sponsors - soil and water conservation districts of Cass and Carroll Counties, and the Rock Creek Cass-Carroll Conservancy District. Estimated total cost - \$1,818,295 (\$1,257,245 PL-566 and \$567,025 Other). Principal problems - floodwater and drainage damage to agricultural lands. Landowner-ship and use - 17 percent tenant-operated; 46,500 acres cropland, 3,200 acres grassland, 2,500 acres woodland, and 4,400 acres in "other" land.

Progress in Land Treatment. Approximately 15 percent of the planned land treatment measures have been applied. Of the 56,000 acres in the watershed, approximately 15,740 acres are in need of resource conservation planning at this time. In this area there are 157 farms, of which 58 are cooperators and 53 have resource conservation plans. Of the 265,000 feet of needed tiles, over 97,037 feet have been installed. Estimated cost of land treatment is \$423,985.

Progress in Structural Measures. Construction on Unit I, approximately 1.2 miles of channel work, was completed May 13, 1971. Construction on Reach "M" which includes 2.4 miles of clearing, snagging and minor channel realignment was begun in 1973 and was completed in 1974. This reach is immediately downstream from the PL-566 project and was paid for 100 percent by Conservancy District funds. The total estimated cost of structural measures including installation of services, easements, and rights-of-way is \$1,394,310 for 15.2 miles of channel work. Construction of approximately 1.2 miles of fishway was completed on Unit I in 1974 at a cost of \$49,500. Project agreement on final unit was signed September 1977. Construction is to be started in January 1978.

Progress in Obtaining Easements and Rights-of-Way. All easements have been obtained.

## ROCK CREEK PROJECT WELLS AND HUNTINGTON COUNTIES

The Project in Brief. Authorized - March 16, 1967. Construction of planned structural measures completed - September 1975. Induced flooding immediately downstream from the completed works of improvement has resulted in the planning of a 1,100 foot levee to supplement this project. The cost of this levee is estimated at \$8,125. The levee is planned to be completed in the fall of 1977. Area - 61,020 acres - all privately-owned. Sponsors - soil and water conservation districts of Huntington and Wells counties, county commissioners and the Rock Creek Conservancy District. A supplement was completed in 1972 to modify the original work plan to reduce adverse environmental effects of the project as found during the project review. Principal problems - floodwater damage and impaired drainage of agricultural lands. Land use - 52,943 acres of cropland, 1,365 acres of grassland, 3,439 acres of woodland, and 3,273 acres of wildlife and miscellaneous land. Revised estimated total cost - \$2,906,390 (\$1,871,200 PL-566 and \$1,035,190 Other). Actual contract construction costs were \$1,889,160 (\$1,701,679 PL-566 and \$187,481 Other). Major works of improvement include 24.1 miles of channel work on the Rock Creek and Whitelock Drains and 2.5 miles of debris removal on the Mossberg Drain. Supplemental additions to reduce the adverse environmental effects include 14.7 miles of one-sided channel construction, fish pools throughout most of the length of the Rock Creek Main Channel and replanting of approximately 51 acres of trees and shrubs adjacent to the berm.

Progress in Land Treatment. Practically all the erosion control measures planned have been applied. Tile and open drainage with complementary grade stabilization structures remain to be installed as landowners' finances permit. Of the 580 farms in the watershed, 430 are district cooperators with 286 having resource conservation plans. Land treatment measures completed are determined to be adequate for project purposes. It is estimated that the cost of land treatment measures installed to date exceeds \$1 million.

Progress in Obtaining Easements and Rights-of-Way. All needed easements and rights-of-way were obtained through the local court for the entire project at a local cost of \$91,327. Court-appointed appraisers determined the value of the needed easements and rights-of-way.

Effectiveness of Project Proved. The largest storm runoff in seven years occurred during the period of February 16-20, 1976. The works of improvement performed as planned with little flood damage to the channel and very minor short duration flooding to bottomlands. No roads were flooded as would have occurred with the preconstruction conditions.



## STUCKER FORK PROJECT SCOTT, JEFFERSON, CLARK, AND WASHINGTON COUNTIES

The Project in Brief. Authorized - September 28, 1962. Estimated completion - in the fiscal year 1979. Area - 117,850 acres (96 percent privately-owned, 4 percent state forest). Sponsors - soil and water conservation districts of Scott, Clark, Jefferson and Washington Counties, the Stucker Fork Conservancy District and the Indiana Department of Natural Resources - Division of Forestry. Estimated total cost - \$7,284,132 (\$3,293,048 PL-566 and \$3,991,084 Other). Land-ownership and use - more than 90 percent of the farms are owner-operated; 55,793 acres of cropland, 15,294 acres of permanent pasture, 34,000 acres of woodland, and 12,763 acres of idle and miscellaneous.

Progress in Land Treatment. Approximately two-thirds of the land treatment has been accomplished in the watershed area. About 84 percent of the farm area is under basic conservation plan. The area above all structures is about 65 percent district cooperators who are actively applying conservation measures to their land. Estimated cost of land treatment is \$3,395,778.

Progress in Structural Measures. Fifteen structures are complete and 3.5 miles of channel work have been done.

Progress in Obtaining Easements and Rights-of-Way. The project is presently being replanned by the watershed planning staff. The draft copy of the supplement is in the hands of the sponsors for study. Easements on the remaining work will be purchased after supplement is finalized.

Effectiveness of Project Proved. Project has proven effective in reducing flooding below structures. There were no large storms in the past year.

## TWIN-RUSH PROJECT WASHINGTON COUNTY

The Project in Brief. Authorized - April 29, 1965. Estimated completion - in the fiscal year 1978. Area - 28,099 acres (99 percent privately owned). Sponsors - Washington County Soil and Water Conservation District, the Twin Rush Conservancy District and the city of Salem. Estimated total cost - \$3,353,058 (\$1,694,823 PL-566 and \$1,658,235 Other). Principal problems - floodwater damage and land scour to agricultural lands and roads. Also, inadequate water supply for future growth of Salem. Land-ownership and use - 5 percent tenant operated; 6,759 acres of cropland; 4,967 acres of grassland; 13,800 acres of woodland and 2,573 acres miscellaneous land.

Progress in Land Treatment. Of the 267 farms in the project, 137 are district cooperators (21,978 acres) and 131 have basic plans (17,412 acres). The major conservation practices needed are diversions; grassed waterways; grade stabilization structures; livestock exclusion and pasture planting.

Progress in Structural Measures. Two of the three planned floodwater retarding structures have been completed. Structure No. 2 is a 220 acre lake furnishing water supply to the city of Salem and No. 3 is a single-purpose structure. Incidental recreation will also be provided by the city of Salem. Local sponsors hope to let construction contract on Structure in the fall of 1977.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District is in the process of acquiring land rights on Structure No. 1.

Effectiveness of Project Proved. Structures numbered 2 and 3 continue to keep channels below them well within their banks. However, to the immediate west of Structure No. 3, where No. 1 is planned, the valley continues to be flooded by the overtopping of streams. Again, frequent flooding this past spring has caused farmers in the area to recognize the urgency of getting this structure in place.

## UPPER BIG BLUE RIVER PROJECT HENRY AND RUSH COUNTIES

The Project in Brief. Authorized - August 1966. Estimated completion - in the fiscal year 1983. Area - 124,000 acres (98 percent privately-owned, state-ownership - 1,526 acres or 1.2 percent, and county-ownership - 371 acres). Sponsorship - soil and water conservation districts of Henry and Rush Counties and the Big Blue River Conservancy District. Estimated total cost - \$15,105,550 (\$8,568,590 PL-566 and \$6,536,910 Other). Principal problems - flooding, impaired drainage, stream pollution, lack of recreational facilities, swamping of agricultural land, and need for future municipal and industrial water supply. Landownership and use - 79 percent owner-operated; 84,128 acres cropland, 19,334 acres grassland, and 9,415 acres woodland.

Progress in Land Treatment. Of the 746 farms in the watershed, 555 are cooperators with the Henry and Rush county soil and water conservation districts. The total land acreage under cooperator agreement is 60,100 acres of which 18,500 acres have had complete conservation treatment applied to the land. There have been 444 conservation plans prepared within the watershed and 33 percent of the planned land treatment measures have been applied to the land. The U.S. Forest Service has marked 620 acres of woodland for harvest and tree planting has taken place on 250 acres within the project area. The soil survey work is 100 percent complete and the estimated cost of land treatment is \$5,232,700.

Progress in Structural Measures. Five floodwater retarding structures have been completed at a PL-566 cost of \$838,800. One multi-purpose recreation, flood control, and water supply structure has been completed at a PL-566 cost of \$208,015. One public recreation facility has been completed at a PL-566 cost of \$98,895; 7.5 miles of stream channel improvement have been completed at a PL-566 cost of \$69,700; 2.5 miles of stream channel work have been completed by the Conservancy District without PL-566 funds. An A&E contract for the design of basic recreation facilities has been completed at a PL-566 cost of \$7,000. An A&E contract for the topographic mapping of one multi-purpose recreation, flood control, and water supply structure and two multi-purpose low flow augmentation flood control structures has been completed at a PL-566 cost of \$16,000. An A&E contract for the design of a multiple-purpose recreation, flood control, and water supply structure has been completed at a PL-566 cost of \$161,700. A contract to construct one multiple-purpose recreation, flood control, and water supply structure will be let in the fall of 1977. The estimated PL-566 cost is \$1,370,700. An A&E contract for the design of two multiple-purpose low flow augmentation and flood control structures is presently under contract at a PL-566 cost of \$117,000. Fencing of a multiple-purpose structure has been completed at a PL-566 cost of \$7,950.

Progress in Obtaining Easements and Rights-of-Way. The Conservancy District has expended approximately \$372,000 for the land rights for five floodwater retarding structures and the stream channel work that has been completed. Purchase of approximately 550 acres for a multi-purpose recreation, flood control, and water supply structure has been completed at a total cost of \$210,200. The PL-566 cost-share was \$62,400. Purchase of approximately 2,600 acres for a multi-purpose recreation, flood control and water supply structure has been completed or is being litigated at a total cost of approximately \$1,514,550. The PL-566 cost-share is \$497,000. To date, \$27,550 has been paid in relocation costs. The PL-566 cost share is \$11,023.

Effectiveness of Project Proved. Five floodwater retarding structures are complete and functioning as intended. Observation of peak flows downstream of the structures indicates that the planned level of protection is being attained. The stream channel work completed shows significant benefits in drainage of land adjacent to the channels, reduction in the frequency of flooding, and improvement of the fishery habitat as evidenced by an increase in the number of species identified after project installation. The general public is making high use of the basic recreation facilities.



## WEST BOGGS CREEK PROJECT DAVIESS AND MARTIN COUNTIES

The Project in Brief. Authorized - October 18, 1966. Estimated completion in the fiscal year 1978. Area - 14,121 acres (100 percent privately-owned with the exception of 1,215 acres owned by the joint park board). Sponsors - Daviess and Martin Park and Recreation Board, and the West Boggs Creek Ditch Repair and Maintenance District. Estimated cost - \$1,780,214 (\$629,193 PL-566 and \$1,151,021 Other). Principal problems - floodwater and sediment damage to agricultural crops and land, and need for a recreational development. Landownership and use - approximately 180 farms in watershed, 65 percent of farmers have off-farm income; 7,200 acres of cropland, 2,540 acres of grassland, 3,390 acres of woodland, and 990 acres of miscellaneous and idle land.

Progress in Land Treatment. Of the 140 potential cooperators in the watershed, 116 are cooperators and 82 have conservation plans developed. Estimated land treatment costs are \$629,193, of which \$40,493 is for technical assistance. Additional REAP funds were allocated to assist with practice application acceleration. Practices which are being stressed by resource conservation planning are parallel tile outlet terraces, diversions, grassed waterways, tree planting, minimum tillage, wildlife habitat management, and pasture management. During FY77 the joint Daviess-Martin Park Board cooperated with the Four Rivers RC&D area in installing 900 feet of diversions and a grade stabilization structure for better erosion control.

Progress in Structural Measures. Construction is complete on the one multiple-purpose structure for the 622-acre lake. Channel work is being reconsidered to determine need and feasibility. The county roads have been raised in five locations where the road elevations were below the level of the lake. The recreational facilities in the 250-acre park are a joint venture of the Indiana Department of Natural Resources, Bureau of Outdoor Recreation and the Daviess and Martin County Park and Recreation Board. Construction is complete for phase "A" of the park, the campgrounds, picnic areas, outdoor sports areas and shelterhouses. An erosion problem adjacent to the emergency spillway was solved by constructing erosion control structures, a diversion and installing tile. This work was completed in the fall of 1974.

Effectiveness of Project Proved. In July 1973, a 7-inch rain during a 48-hour period created severe flooding in areas adjoining the watershed which were not protected by flood control measures. Little or no flooding occurred below the multi-purpose structure. Many farmers said they would have lost their entire crop on the bottomland if this structure had not been constructed. The 250-acre park and recreation area has been used extensively. In fact,

income from the facilities paid first-year operating expenses. In 1976 an estimated 255,000 visitor days were spent in the park. The park has established the reputation as one of the cleanest parks in the country. The joint park board has received a \$540,800 grant from EDA for the construction of a golf course, health and exercise center and restaurant at the park. Total price of this project should be about \$676,000. The lake has been stocked with bass, redear, channel catfish and bluegill. Fishing is excellent. During fall migration, the lake was open for duck hunting. This has brought increased income to the community. Several new businesses have been started such as restaurants, hotels, a grocery store, roadside market, bait and boat shops, service stations, etc. Several of the older establishments and businesses have been remodeled and expanded to accommodate growing demand. Three subdivisions have been developed along with a mobile home park and private camping facilities. Local community leaders are very pleased with the success of the project to date.

**EAST FORK OF WHITEWATER RIVER PROJECT**  
**WAYNE, UNION, FAYETTE, RANDOLPH, AND FRANKLIN COUNTIES, INDIANA**  
**and**  
**DARKE AND PREBLE COUNTIES, OHIO**

The Project in Brief. Authorized - October 1974. Estimated completion - in the fiscal year 1983. Area - 246,900 acres. Sponsors - Indiana - soil and water conservation districts of Wayne, Union, Randolph, Fayette, and Franklin Counties, and the Whitewater Valley Conservancy District; Ohio - soil and water conservation districts of Darke and Preble Counties, and the Jefferson Township Park Board. Estimated total cost - \$10,493,987 (\$3,211,428 PL-566 and \$7,282,559 Other). Principal problems - lack of recreational opportunities in the area; need for additional municipal and industrial water supply; floodwater damage to crops, pasture, agricultural properties, roads, and bridges; erosion and/or sediment damage to flood plains, channels, roads, bridges, and existing reservoirs; floodwater and impaired drainage conditions on about 600 acres in upstream channel areas; and deterioration of the quality of the environment.

Progress in Land Treatment. There are about 1,216 farms in the watershed. In Indiana, approximately 54 percent of these farms are under cooperative agreement with the local soil and water conservation districts. Of these, 29 percent have basic plans and 50 percent of the land is adequately treated. Soil survey mapping has been done on about 6,000 acres in the Indiana portion of the watershed this year. Construction plans for two special land treatment sites have been prepared. In the Ohio portion, of 224 farms about 50 percent of the farms are under cooperative agreement. Approximately 37 percent of the farms have conservation plans.

Progress in Structural Measures. The planned structural measures include: 1 floodwater retarding structure; 3 multiple-purpose floodwater retarding-recreation structures with public recreation facilities; 2 multiple-purpose floodwater retarding-water supply structures; 1 channel recreation development; and 19.6 miles of multiple-purpose flood prevention and drainage channel work. In Indiana, the field surveys on 1 floodwater structure are complete. On August 30, 1975, the Wayne County Circuit Court disapproved the Indiana portion of the work plan. A hearing by the Natural Resources Commission was held on June 21, 1976, in Richmond on a petition to dissolve the Conservancy District. The State Commission is to report their findings to the Wayne County Circuit Court on October 26, 1976. The Conservancy District has been studying several alternatives to the planned work in Indiana. In Ohio, bids are planned to be let on 4.4 miles of channel improvement on the New Madison branch of Upper East Fork. No construction contracts have been awarded.

Progress in Obtaining Easements and Rights-of-Way. In Indiana, the Conservancy District has prepared a land rights agreement for use in obtaining land rights on the special land treatment measures. No funds have been spent on land rights acquisition. The Conservancy District has about \$185,000 available for acquisition and construction.



## RIVER BASIN STUDIES

River basin studies by the United States Department of Agriculture (USDA) are carried out under the authority of Section 6 of the Watershed Protection and Flood Prevention Act (PL-566, 83rd Congress, as amended). Currently, in Indiana, framework studies on the Ohio River Basin, Upper Mississippi River Basin, and the Great Lakes Basin have been completed. A Type II Comprehensive Study has been completed for the Wabash River Basin and a cooperative survey has been completed on the Elkhart and the Kankakee river basins. A Level B Comprehensive Study is underway on the Maumee River Basin and the Ohio River Main Stem.

The principal participants for the USDA in these studies are the Soil Conservation Service (SCS), U.S. Forest Service (FS), and the Economic Research Service (ERS). Further information regarding the various river basin studies in Indiana can be obtained from Mr. Buell M. Ferguson, State Conservationist, Soil Conservation Service, 5610 Crawfordsville Road, Suite 2200, Indianapolis, Indiana 46224.

### Kankakee River Basin

The Kankakee River Basin is a part of the eastern portion of the Upper Mississippi River Basin and is a tributary of the Illinois River.

The Kankakee River Basin is located in northwestern Indiana and northeastern Illinois and has a total drainage area of 5,280 square miles. Of this, 2,155 square miles are in Illinois and 3,125 square miles are in Indiana. The Indiana portion is comprised of 2,190 square miles which drain directly into the Kankakee River and 935 square miles which are part of the Iroquois River drainage system. The Iroquois River lies to the south of the Kankakee River and joins the Kankakee about 5 miles upstream from Kankakee, Illinois. The other major tributary is the Yellow River which comprises 427 square miles entirely in Indiana.

The Department of Natural Resources, State of Indiana (IDNR), requested the USDA to make a cooperative River Basin Investigation and Survey of the Kankakee River Basin, Indiana. The study is needed to determine the water and related land resource problems and needs, to propose solutions to problems associated with watershed protection, flood prevention, channel drainage, municipal and industrial water supply, fish and wildlife, recreation, water quality and other related purposes, and to determine the extent to which action will be needed beyond the scope of available going programs.

On July 23, 1970, the state conservationist for Indiana was advised that the study would be funded in fiscal year 1971. The study was completed in October 1976.

The SCS, FS and the ERS, with the assistance of IDNR, are co-operating with representatives of other federal, state and local agencies in the preparation of a comprehensive program for the conservation and development of water and related land resources to meet foreseeable short- and long-term needs. Projects and programs that should be initiated within the next 10 to 15 years will be identified. The USDA provided assistance in identifying problems and needs and recommended solutions for recognized problems. Assistance from agencies outside of USDA, including contribution of information and review of study findings, was utilized.

Several types of studies have been made, but all have been for or by special interests. The Corps of Engineers has studied channel work and levee construction for flood control along the main channel. The SCS was reimbursed by the Corps to make a tributary drainage study to help them determine the benefits which will accrue to agriculture by works of improvement on the mainstem. Wildlife interests have attempted to cause reversion of large areas back to wildlife preserves. Many farmers and land-owners want drainage and flood prevention. No comprehensive study or plan with the goal of an overall plan which would be agreeable to all major interests with alternative courses of action has ever been attempted in this basin. Such a plan is vitally needed to allow progressive long-range resource management and development of the basin.

This basin is part of the Upper Mississippi River Basin on which a framework plan was completed in 1972.

The purpose of the study is to present the best combination of alternatives for solution that can be achieved in cooperation with local interests. This was done by combining all facts from previous studies, making surveys to fill in any remaining information gaps, and working with concerned local, state and federal agencies.

### Elkhart River Basin

The Elkhart River Basin is a tributary of the St. Joseph River and part of the Great Lakes Basin. The Elkhart River Basin is located in northcentral Indiana and has a total drainage area of 710 square miles. The Elkhart River originates in the northeastern part of DeKalb County, flows westward across Noble County into Elkhart County, then northeasterly to the city of Elkhart where it enters the St. Joseph River. The Elkhart

River Basin includes parts of five Indiana counties - DeKalb, Noble, LaGrange, Kosciusko and Elkhart.

The IDNR requested USDA to participate in a cooperative river basin survey of the Elkhart River Basin. The study is needed to determine the water and related land resource problems and needs and to propose solutions to problems associated with watershed protection, flood prevention, drainage, municipal and industrial water supply, fish and wildlife, recreation, water quality and other related purposes such as lake level control, and to determine the extent to which action will be needed beyond the scope of available going programs.

On July 23, 1970, the state conservationist for Indiana was advised that the study would be funded in fiscal year 1971. The study was completed in July 1976.

The SCS, FS, and ERS, with the assistance of IDNR, are co-operating with representatives of other federal, state and local agencies in the preparation of a comprehensive program for the conservation and development of water and related land resources to meet foreseeable short- and long-term needs. Projects and programs that should be initiated within the next 10 to 15 years were identified.

The USDA provided assistance in identifying problems and needs and recommended solutions for recognized problems. Assistance from agencies outside of USDA, including contribution of information and review of study findings, was utilized.

This basin is part of the Great Lakes Basin on which a framework plan was completed in 1974, and part of the St. Joseph River on which limited studies have been made.

The purpose of the study is to present the best combination of alternatives for solution that can be achieved in cooperation with local interests. This was done by combining all facts from previous studies, making surveys to fill in any remaining information gaps, and working with concerned local, state and federal agencies.

#### Wabash River Basin Comprehensive Study

The Wabash River Basin is located between Lake Michigan and the Ohio River in the northwestern portion of the Ohio River Basin. The basin includes a total of 33,100 square miles or about 21 million acres in the three states of Illinois, Indiana and Ohio. About 8,563 square miles are in Illinois, 24,218 in Indiana and 319 in Ohio.

The Congress of the United States directed a comprehensive study of the region by responsible federal agencies in cooperation with state and local governments. The study was begun in 1962, with USDA participation beginning in 1963. The state conservationist of Indiana was designated USDA representative on the Wabash study coordinating committee. The plan, completed in 1971, provides for the conservation, development and utilization of water and related land resources to meet immediate needs and projected requirements for the next 50 years.

The USDA responsibilities included the determination of future agricultural land and water needs, and an appraisal of the floodwater problems and needed upstream developments. In the course of the study, over 540 hydrologic units (small watershed areas) were examined with 180 selected for further detailed study and analysis. Over 1,300 dam sites were reviewed and this information is included in the final report. There are 287 structures planned as part of the "early action" projects.

It was determined that 85 potential projects in the upstream watersheds needed to be developed in the next 10 to 15 years. This determination was based on the urgency of local needs, problems, and interest. A watershed investigation report was prepared for 62 of these projects. These reports include sufficient information to inform local organizations of the project possibilities and also to serve as a guide for detailed studies in watershed planning.

The final USDA report on the Wabash River Basin describes the present and future agricultural needs for land, land treatment and management. Special emphasis is placed on their relation to water resources, and the present and future needs for project-type developments. It includes discussions of the present and projected agricultural economy of the basin, the needs and potential for water and related land resource development, opportunities for development in the near and projected future, and the impact of USDA programs.

The Ohio River Basin Commission has integrated the study into their Comprehensive Coordinated Joint Plan (CCJP) baseline and priorities report.

#### Ohio River Basin - Framework Study

The Ohio River Basin study area is bounded on the north by the Great Lakes drainage area, on the east by the divide of the Appalachian Mountains, on the south by the Tennessee River Basin, and on the west by the Mississippi River drainage area. It includes all or part of the states of Illinois, Indiana, Ohio, Kentucky, West Virginia, Pennsylvania, New York, Maryland, Virginia, North Carolina and Tennessee. The basin area under study includes 163,000 square miles, omitting only the Tennessee River Subbasin area.



Congress authorized the framework study of the Ohio River Basin in 1962 and USDA activities began in 1964. The state conservationist for Indiana was designated by the Secretary of Agriculture as the Department's representative on the coordinating committee. The agricultural report was completed and printed in 1966.

The objective of this survey was to provide a broad guide for the best uses of water and related land resources. The USDA had primary responsibility to determine land and water needs for agriculture and the water problems in upstream areas. This also included the appraisal of potential project development in these upstream regions.

For Indiana, this involved the summarization of Wabash River Basin data and the analysis of water problems and needs in the Whitewater River area. The Ohio River drainage was also considered, including Pigeon Creek, Anderson River, Indian Creek and Silver Creek. Similar studies were carried out in the 11 states within, or partly within the Ohio Basin.

The report includes some highly important information about agriculture and potential developments over the next 50 years. In upstream areas, agriculture damage is approximately \$30 million and urban damage approximately \$15 million. This damage occurs on three million acres of floodplain land in these areas. Over one-third of this damage affects Indiana.

The study also shows about 600 potential upstream watershed projects within the basin with approximately 25 percent of these in Indiana. Nearly 11 million acres of cropland are in need of protection from erosion. Sixteen million acres of pastureland need improve and 22 million acres of forest land need improvement in the timber stands, or further stand establishment.

The Ohio River Basin Survey is complete.

#### Upper Mississippi River Basin - Framework Study

The Upper Mississippi River Basin study area is located in the northcentral United States. It is bound on the north by the Hudson Bay drainage area; on the northeast by Great Lakes Basin drainage; on the southeast by the Ohio River Basin; on the south by the Arkansas, White and Red rivers; and on the west by the Missouri River drainage. It includes 189,037 square miles in the states of Illinois, Indiana, Wisconsin, Michigan, Minnesota, South Dakota, Iowa and Missouri.

The survey that is being carried on in the Upper Mississippi River Basin is similar to that described for the Ohio River Basin.

The state conservationist of Iowa was designated as the USDA representative on the coordinating committee.

Indiana is involved in this survey since a large part of the Kankakee River drainage area is in the northwestern part of the state. The Indiana portion of this basin study was completed in calendar year 1967. The Kankakee River Basin Type IV Study, previously described, includes all of the Upper Mississippi River Basin which lies in Indiana.

From the projections made in these various river basin studies, it is evident that the need for "project type" approaches to water and related land resource problems is very great in Indiana. This condition is reflected in our rapidly expanding watershed protection program. We must be prepared to accept this responsibility for the people of the Hoosier State.

The Upper Mississippi River Basin Survey and Report was completed in 1972. The Upper Mississippi River Basin Commission was established in 1972 to coordinate and develop plans for water and related land resource development within the basin.

#### Great Lakes Basin - Framework Study

The Great Lakes Basin Study includes all of the area in the United States that drains into the Great Lakes and those streams entering the St. Lawrence River within the United States. It includes about 129,000 square miles of which about 68,000 are land area and about 61,000 are water area. The land areas of the basin are in the states of Minnesota, Wisconsin, Illinois, Michigan, Indiana, Ohio, Pennsylvania and New York.

In 1966, the President of the United States established the Great Lakes Basin Commission upon request of the majority of the states involved. The Commission includes representatives of the eight states and the federal departments having major responsibilities in the development of land and water resources in the basin. The state conservationist of Michigan was designated as the USDA representative on the Commission.

The Great Lakes Basin Commission initiated a framework survey of the basin in fiscal year 1968. This survey was similar in purpose and scope to that described for the Ohio River Basin. The study was coordinated by the commission and the report was completed in 1974.

The study involves Indiana since a large part of the Maumee River Basin is in northeastern Indiana, the St. Joseph River is in northern Indiana, and the Calumet River is in northwestern Indiana. Agricultural data have been evaluated and tabulated

by counties and published by Conservation Needs Inventory. The latest publication for Indiana is dated 1968. These data are the basis for analysis of problems and needs and for recommended solutions.

#### Maumee River Basin

The Maumee River Basin is located in northeastern Indiana, northwestern Ohio and southeastern Michigan, with the major cities of Fort Wayne, Indiana, and Toledo, Ohio. This basin is part of the Great Lakes Basin Framework Study.

The Maumee study is the first Level B study in the nation authorized under Section 209 of Public Law 92-500. The study was begun in 1973 and is scheduled for completion in 1977. The state conservationist of Ohio has been assigned responsibility for the USDA technical participation in the study.

The USDA primary responsibilities include an appraisal of flooding, erosion and sedimentation, the agricultural reference, and land use and management with some input into other references.

#### Ohio Main Stem River Basin

The Level B Ohio Main Stem River Basin is located on both sides of the Ohio River and covers 45,000 square miles in Indiana, Illinois, Kentucky, Ohio, West Virginia and Pennsylvania. The study is divided into three subareas for ease in data collection as follows: Subregion 503, Upper Ohio - 16,000 square miles in Ohio, Pennsylvania and West Virginia; Subregion 509, Middle Ohio - 11,000 square miles in Indiana, Kentucky, Ohio and West Virginia; and Subregion 514, Lower Ohio - 18,000 square miles in Illinois, Indiana and Kentucky. This basin is part of the Ohio River Basin Framework Study.

The study was begun in 1976 and is scheduled for completion in 1978. The state conservationist of Indiana has been assigned responsibility for the USDA technical participation in the study.





## WATERSHED CONSTRUCTION

Units of Contract Work to be Awarded During the Period  
October 1, 1977 to September 30, 1978

<u>Congressional District</u>	<u>Watershed and (County) Location</u>	<u>Measure</u>	<u>Contract Dollars (PL-566)</u>
5th	Rock Creek-Cass (Cass and Carroll)	Channel Work	\$ 998,595
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7th	Bachelor Run (Carroll and Howard)	Unit 4	\$ 150,300
	Little Raccoon Creek (Parke, Montgomery & Putnam)	Repair - Strs. 3, 12B and 16	\$ 22,000
	Lye Creek Drain (Montgomery)	Unit 2	\$ 130,000
	Jordan Creek (Warren)	Reach J Channel Work	\$ 34,000
		Subtotal	\$ 336,300
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9th	Delaney Creek (Washington)	Str. 5 Rec. Facilities	\$ 192,500
	Twin-Rush Creek (Washington)	Str. 1	\$ 342,570
		Subtotal	\$ 535,070
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10th	Rock Creek-Wells (Wells & Huntington)	Levee Work	\$ 8,000
	Upper Big Blue River (Henry & Rush)	Str. 20	\$ 1,700,000
		Subtotal	\$ 1,708,000
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	PL-566 Construction Cost	TOTAL	\$ 3,577,965

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PL-566 Installation Services  
for Land Treatment and Structural  
Measures (Est. for FY-1978)

\$ 1,300,000

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## CURRENT AND PROJECTED STATUS OF WATERSHED OPERATIONS

### 5th Congressional District

Rock Creek-Cass - Channel Work - Construction expected to start -  
November 1977.

### 7th Congressional District

Bachelor Run - Channel Work - Construction expected to start -  
January 1978.

Little Raccoon Creek - Repair Work - Construction expected to start -  
November 1977.

Lye Creek Drain - Unit 2 Channel Work - Construction expected to start -  
July 1978.

Jordan Creek - Reach J - Channel Work - Construction expected to start -  
January 1978.

### 9th Congressional District

Delaney Creek - Structure 5 Recreation Facilities - Construction expected to  
start - January 1978.

Twin-Rush Creek - Structure 1 - Construction expected to start -  
April 1978.

### 10th Congressional District

Rock Creek-Wellis - Levee - Construction expected to start -  
November 1977.

Upper Big Blue River - Structure 20 - Construction expected to start -  
November 1977.





## SPONSORING LOCAL ORGANIZATIONS

### ANDERSON RIVER WATERSHED

Joe Jasper, Chairman  
Anderson River Conservancy  
District  
Siberia, IN 47582

Perry County Park and  
Recreation Board

Town of Birdseye

Indiana Department of Natural  
Resources (Forestry Division)

Soil and Water Conservation  
Districts of Dubois, Perry,  
Crawford and Spencer Counties

### BACHELOR RUN WATERSHED

Milton D. Bowman, Chairman  
Bachelor Run Conservancy  
District  
Route 3  
Delphi, IN 46923

Carroll County Soil and Water  
Conservation District

### BAILEY-COX-NEWTSON WATERSHED

Frank Pulver, Chairman  
Bailey-Cox-Newtson Conservancy  
District  
Route 4  
Knox, IN 46534

Starke County Soil and Water  
Conservation District

### BIG RACCOON WATERSHED

William R. Hawley, Chairman  
Big Raccoon Conservancy  
District  
P. O. Box 334  
Ladoga, IN 47954

Soil and Water Conservation  
Districts of Montgomery,  
Parke, Putnam and Boone  
Counties

### BUSSERON WATERSHED

Harold Dodd, Chairman  
Busseron Conservancy District  
Court House  
Sullivan, IN 47882

Sullivan Park and Recreation  
Board

Indiana Department of Natural  
Resources

Soil and Water Conservation  
Districts of Clay, Greene,  
Sullivan and Vigo Counties

### DELANEY CREEK WATERSHED

Ralph Dickmeyer, Chairman  
Delaney Creek Conservancy  
District  
202 N. Mill Street  
Salem, IN 47167

Washington County Park and  
Recreation Board

Indiana Department of Natural  
Resources (Forestry Division)

Washington County Soil and  
Water Conservation District

### FALL CREEK WATERSHED

Phil Fisher, President  
Williamsport Board of Parks  
and Recreation  
100 East Monroe Street  
Williamsport, IN 47993

Williamsport Town Board

Warren County Soil and Water  
Conservation District

### HALL-FLAT CREEK WATERSHED

Raymond Schnaus, Chairman  
Hall-Flat Creek Conservancy  
District  
R. R. #1  
St. Anthony, IN 47575

Dubois County Soil and Water  
Conservation District

INDIAN CREEK WATERSHED

Soil and Water Conservation  
Districts of Morgan, Johnson,  
Brown and Monroe Counties

JORDAN CREEK WATERSHED

William Davis, Chairman  
Jordan Creek Conservancy District  
Box 6  
Pence, IN 47973

Warren County Soil and Water  
Conservation District

LITTLE RACCOON CREEK WATERSHED

Norval Dixon, Jr., Chairman  
Little Raccoon Conservancy  
District  
702 West Ohio Street  
Rockville, IN 47872

Soil and Water Conservation  
Districts of Parke, Putnam  
and Montgomery Counties

LITTLE WALNUT CREEK WATERSHED

William Wright, Chairman  
Little Walnut Creek Conservancy  
District  
R. R. #4  
Greencastle, IN 46135

Putnam County Soil and Water  
Conservation District

LOST RIVER WATERSHED

Noel L. Newlin, Chairman  
Lost River-Springs Valley  
Conservancy District  
Ritz Building, R. R. #3  
Paoli, IN 47454

Orange County Park and  
Recreation Board

Town of Paoli

Soil and Water Conservation  
Districts of Dubois, Lawrence,  
Martin, Orange and Washington  
Counties

LYE CREEK DRAIN WATERSHED

Samuel R. Boots, Chairman  
Montgomery County Drainage  
Board  
Courthouse  
Crawfordsville, IN 47993

Montgomery County Soil and  
Water Conservation District

MIDDLE FORK OF ANDERSON RIVER  
WATERSHED

Karl Gayer, Chairman  
Middle Fork Watershed  
Conservancy District  
P. O. Box 248  
Cannelton, IN 47520

Soil and Water Conservation  
Districts of Perry and  
Crawford Counties

MUDDY FORK OF SILVER CREEK  
WATERSHED

John E. Dreyer, Chairman  
Muddy Fork Conservancy District  
c/o Borden Museum  
Borden, IN 47106

Town Board of New Providence

Soil and Water Conservation  
Districts of Clark, Floyd  
and Washington Counties

PRAIRIE CREEK (VIGO) WATERSHED

Lloyd Deutsch, Chairman  
Prairie Creek-Vigo Conservancy  
District  
Southland Box 2038  
Terre Haute, IN 47802

Vigo County Soil and Water  
Conservation District

PRIDES CREEK WATERSHED

Denver Gladish, Chairman  
Prides Creek Conservancy District  
R. R. #2  
Petersburg, IN 47567

Pike County Soil and Water  
Conservation District

ROCK CREEK (CASS) WATERSHED

Carl B. Jones, Chairman  
Rock Creek Cass-Carroll  
Conservancy District  
425 W. Northern Avenue  
Logansport, IN 46947

Soil and Water Conservation  
Districts of Cass and  
Carroll Counties

ROCK CREEK (WELLS) WATERSHED

Herman Osborn, Chairman  
Rock Creek-Wells Conservancy  
District  
122 LaMar Street  
Bluffton, IN 46714

Soil and Water Conservation  
Districts and County  
Commissioners of Wells and  
Huntington Counties

STUCKER FORK WATERSHED

John Sommerville, Chairman  
Stucker Fork Conservancy  
District  
440 Gardner  
Scottsburg, IN 47170

Indiana Department of Natural  
Resources (Forestry Division)

Soil and Water Conservation  
Districts of Scott, Clark,  
Jefferson and Washington  
Counties

TWIN-RUSH CREEK WATERSHED

Malcolm Staff, Chairman  
Twin-Rush Creek Conservancy  
District  
R. R. #1  
Campbellsburg, IN 47108

City of Salem

Washington County Soil and Water  
Conservation District

UPPER BIG BLUE RIVER WATERSHED

George Denton, Chairman  
Big Blue River Conservancy  
District  
1224 1/2 broad Street  
New Castle, IN 47362

Soil and Water Conservation  
Districts of Henry and  
Rush Counties

WEST BOGGS CREEK WATERSHED

Wayne Walton, Chairman  
West Boggs Creek Ditch Repair  
and Maintenance District  
R. R. #3  
Loogootee, IN 47553

Daviess-Martin Park and  
Recreation Board

Soil and Water Conservation  
Districts of Daviess and  
Martin Counties

EAST FORK OF WHITEWATER RIVER  
WATERSHED

Douglas C. Dickey, Chairman  
Whitewater Valley Conservancy  
District  
431 Straightline Pike  
Richmond, IN 47374

Soil and Water Conservation  
Districts of Wayne, Union,  
Randolph, Fayette and  
Franklin Counties, Indiana

Soil and Water Conservation  
Districts of Darke and Preble  
Counties, Ohio

Jefferson Township Park Board,  
Ohio









SOIL CONSERVATION SERVICE